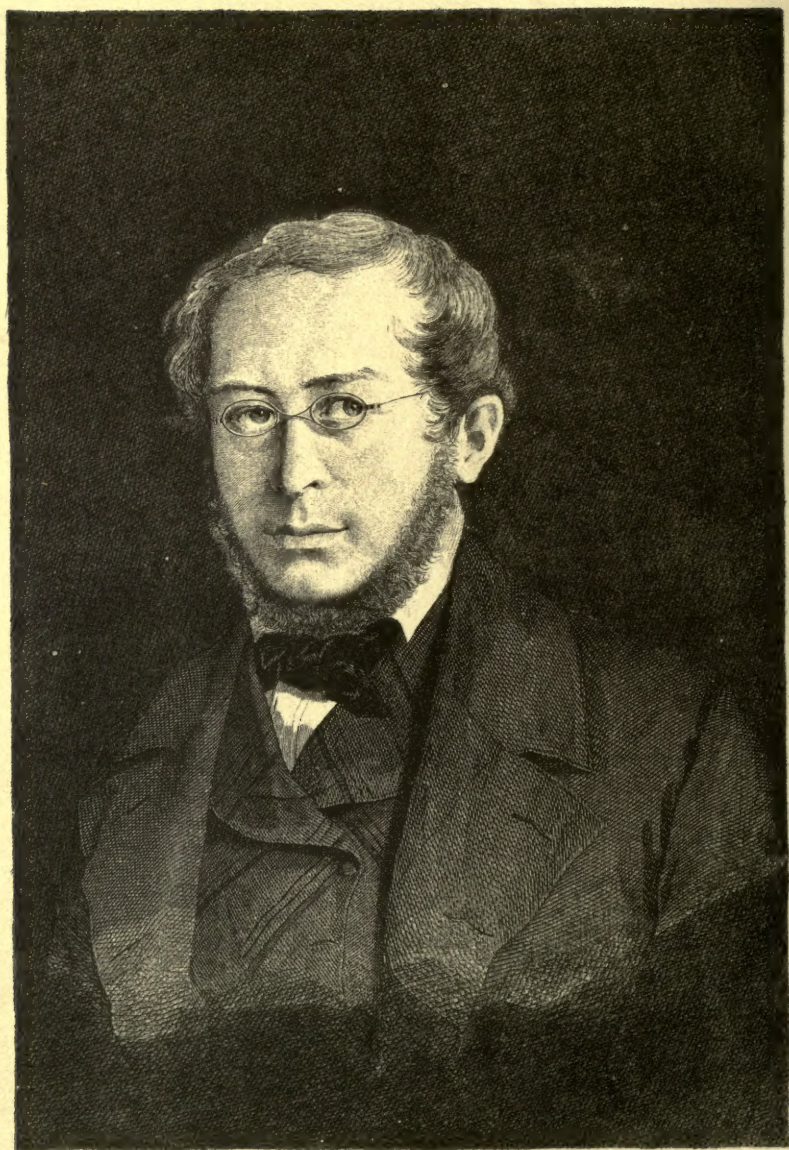


Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

UNIVERSITY LIBRARY
X-16251



AND

POPULAR SCIENCE

CONTAINING

A RECORD OF THE HUMAN RACE FROM THE
EARLIEST HISTORICAL PERIOD TO THE PRESENT TIME
EMBRACING A GENERAL SURVEY OF THE PROGRESS OF MANKIND
IN NATIONAL AND SOCIAL LIFE, CIVIL GOVERNMENT,
RELIGION, LITERATURE, SCIENCE AND ART

Complete in Twenty-five Volumes

THE TEXT SUPPLEMENTED AND ENDEARED BY MORE THAN SEVEN HUNDRED
PORTRAITS AND OTHER ILLUSTRATIONS, MAPS AND CHARTS

INTRODUCTION BY

HUBERT ROSE AUSTIN

A. J. PROUDHON

*Designed and Illustrated by William Morris, and Engraved by
American Universities, incorporated in the Library*

GEORGE EMORY FELLOWS, Ph.D.
LL.D.

President, University of Maine

TEMP FLUMMER BATTLE, A.M.
LL.D.

Professor of History, University of North Carolina

AMBROSE P. WINSTON, Ph.D.

Assistant Professor of Economics, Washington University

WILLIAM E. PERKINS

Professor of History, University of Iowa

REV. GEO. M. GRANT, D.D.

Professor of History, University of Toronto, Ontario, Canada

MOSES COIT TYLER, A.M.

Late Professor of American History, Cornell University

ELISHA BENJAMIN ANDREWS, LL.D.

Chairman, University of Nebraska

WILLIAM TORNEY HARRIS, LL.D.

Formerly Deane State Commissioner of Education

JOHN HANSON THOMAS McPHERSON, Ph.D.

Professor of History, University of Georgia

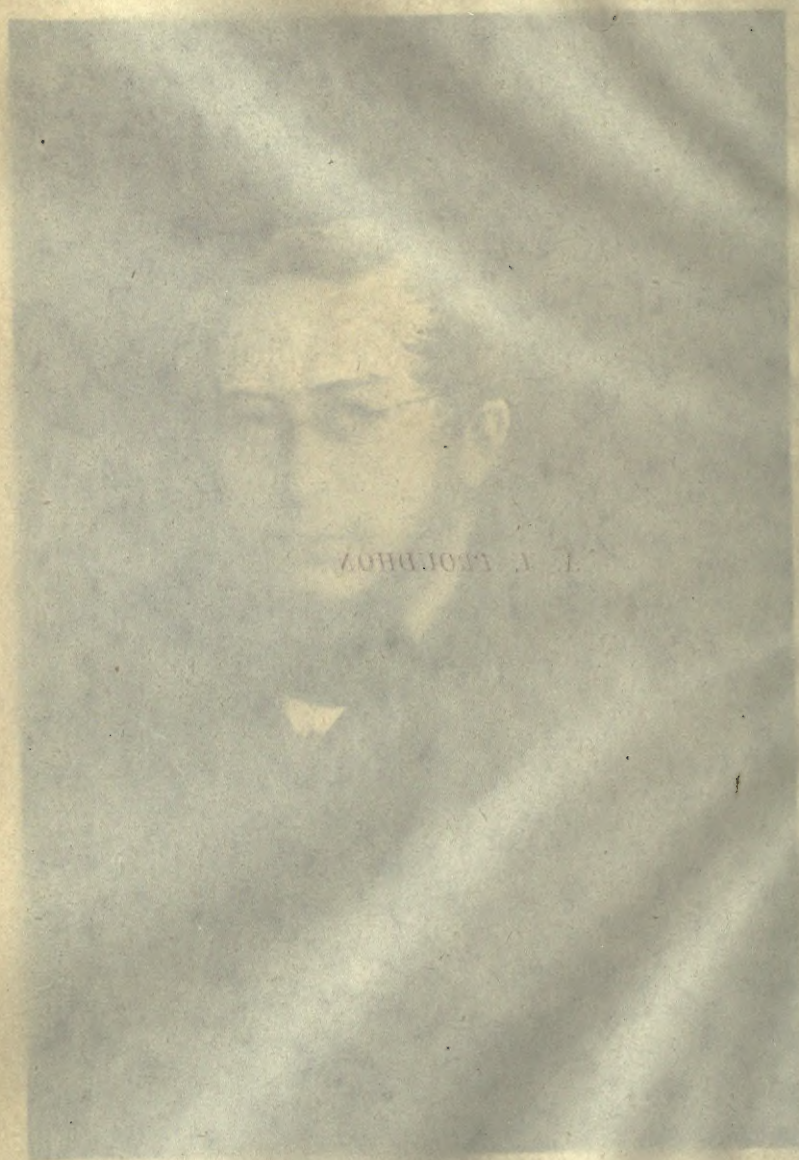
RICHARD HEATH DABNEY, LL.D.

Professor of History, University of Virginia

NEW YORK AND CHICAGO

THE BANCROFT SOCIETY

1910



LIBRARY of UNIVERSAL HISTORY AND POPULAR SCIENCE

CONTAINING

A RECORD OF THE HUMAN RACE FROM THE
EARLIEST HISTORICAL PERIOD TO THE PRESENT TIME;
EMBRACING A GENERAL SURVEY OF THE PROGRESS OF MANKIND
IN NATIONAL AND SOCIAL LIFE, CIVIL GOVERNMENT,
RELIGION, LITERATURE, SCIENCE AND ART

Complete in Twenty-five Volumes

THE TEXT SUPPLEMENTED AND EMBELLISHED BY MORE THAN SEVEN HUNDRED
PORTRAITS AND OTHER ILLUSTRATIONS, MAPS AND CHARTS

INTRODUCTION BY
HUBERT HOWE BANCROFT
HISTORIAN
GEORGE EDWIN RINES
MANAGING EDITOR

*Reviewed and Endorsed by Fifteen Professors in History and Educators in
American Universities, among whom are the following:*

GEORGE EMORY FELLOWS, Ph.D.,
LL.D.

President, University of Maine

KEMP PLUMMER BATTLE, A.M.,
LL.D.

Professor of History, University of North Carolina

AMBROSE P. WINSTON, Ph.D.

Assistant Professor of Economics, Washington Uni-
versity

WILLIAM R. PERKINS

Professor of History, University of Iowa

REV. GEO. M. GRANT, D.D.

Late Principal of Queen's University, Kingston,
Ontario, Canada

MOSES COIT TYLER, A.M., Ph.D.
Late Professor of American History, Cornell Uni-
versity

ELISHA BENJAMIN ANDREWS, LL.D.,
D.D.

Chancellor, University of Nebraska

WILLIAM TORREY HARRIS, Ph.D.,
LL.D.

Formerly United States Commissioner of Education

JOHN HANSON THOMAS McPHER-
SON, Ph.D.

Professor of History, University of Georgia

RICHARD HEATH DABNEY, A.M.,
Ph.D.

Professor of History, University of Virginia

NEW YORK AND CHICAGO

THE BANCROFT SOCIETY

1910

COPYRIGHT, 1906, BY
WILLIAM S. BRYAN

LIBRARY OF UNIVERSAL HISTORY AND POPULAR SCIENCE

Containing a record of the human race from the earliest historical period to the present time. Embracing a general survey of the progress of mankind in national and social life, civil government, religion, literature science and art. : : :

Complete in **TWENTY-FIVE MASSIVE VOLUMES**

EDITORS IN CHIEF

GEORGE EDWIN RINES, Editor of Encyclopedia Americana

HUBERT HOWE BANCROFT, Author Bancroft History of the United States

WILLIAM S. BRYAN, Author of "Footprints of the World's History," "Americas War for Humanity,"
"Our Islands and Their People."

ISRAEL SMITH CLARE, Author of "Illustrated Universal History." Complete Historical Compendium," "Unrivalled History of the World," History of the British-Boer War," and Other Works; Also Author of the Series of Forty Historical Maps; Member of the Amer. His. Asso.

ADVISORY BOARD

JOHN TROWBRIDGE, Sc. D., Professor of Applied Science, Harvard University.

HENRY EMERY, A. M., Ph. D., Professor of Political Economy, Yale University.

GEORGE WILLIS BOTSFORD, A. M., Ph. D., Professor of Ancient History, Columbia University.

ALEXANDER T. ORMOND, Ph. D., Professor Philosophy, Princeton University.

JAMES H. BALDWIN, M. A., Ph. D., Hon. D. Sc. (Oxford), LL. D. (Glasgow). Professor Philosophy and Psychology, John Hopkins University.

MARSHAL S. BROWN, A. M., Professor History and Political Science, New York University.

GEORGE EMERY FELLOWS, Ph. D. LL. D., President University of Maine.

KEMP PLUMBER BATTLE, A. M. LL. D., Professor of History, University of North Carolina.

AMBROSE P. WINSTON, Ph. D., Assistant Professor Economics, Washington, University.

WILLIAM R. PERKINS, Professor History, University of Iowa.

REV. GEO. M. GRANT, D. D., Late Principal of Queen's University, Kingston, Ontario, Canada.

MOSES COIT TYLER, A. M., Ph. D., Late Professor of American History, Cornell University.

ELISHA BENJAMIN ANDREWS, LL. D., D. D., Chancellor, University of Nebraska.

WILLIAM TORREY HARRIS, Ph. D., LL. D., Formerly United States Commissioner of Education.

JOHN HANSON THOMAS McPHERSON, Ph. D., Professor of History, University of Georgia.

RICHARD HEATH DABNEY, A. M., Ph. D., Professor of History, University of Virginia.

MILLAR PUBLISHING COMPANY

225 Fifth Avenue, New York

San Francisco, Cal.

Los Angeles, Cal.

610-12 Oscar Luning Bldg, 45 Kearny St.

341-42 San Fernando Bldg, 4th & Main Sts.



PROBLEMS OF THE FUTURE

AND ESSAYS

BY

S. LAING

AUTHOR OF "MODERN SCIENCE AND MODERN THOUGHT,"
"A MODERN ZOROASTRIAN," ETC.



NEW YORK:

THE HUMBOLDT LIBRARY ASSOCIATION

CONTENTS.

CHAPTER I.

SOLAR HEAT.

Difference between Astronomers and Geologists—The former say twenty, the latter two hundred millions of years—Argument of Astronomers—Amount of Heat received from Sun—How Supply kept up—Meteorites—Gravity—Method of Calculation—Result: Supply of Heat cannot have lasted more than ten to fifteen millions of years—Case of Geologists—Progress of the Science—Theological—Theologic-Scientific—Scientific—Uniformity of Conditions—Proved by Fossil Remains—By Temperature and Atmosphere—Assuming Uniformity, Time required—Instances—Solent River—Eocene Lake—Lake of Geneva—Coal Measures—Geology based on Facts—Mathematical Conclusions on Theory—If Heat comes from Gravity, where does Gravity come from—Gravity really unknown—Different Theories as to Solar Heat—Lockyer and Crookes—Sun-spots—Magnetic Storms—Conservation of Energy. *Page 9.*

CHAPTER II.

WHAT THE UNIVERSE IS MADE OF.

Shooting Stars: their number, velocity, size—Connection with Comets—Composition—Spectra—Meteorite Theory—Genesis of Stars and Nebulæ—Further stage of Theory—Impact Theory—Dark Suns in Space—Temperature of Visible Stars—Their proper Motions—New Stars—Variable Stars—Facts better explained by Impact Theory—Laplace's Theory—Based solely on Gravity—Not inconsistent but insufficient—Even Impact Theory not last step—Stony Masses made of Atoms—What are Atoms—Chemical Elements—Attempts to reduce them to one—Hydrogen—Helium—Mendelejoff's Law—Atoms Manufactured Articles—All of one Pattern—Vortex Theory—What behind Atoms—The Unknowable. *Page 25.*

CHAPTER III.

CLIMATE.

Conflict between Geology and Astronomy—Geology asserts Uniformity of Climate until Recent Times—Astronomy asserts Inclination of Earth's Axis to be invariable, and therefore Climates necessary—Evidence for Warm and Uniform Climates—Greenland—Spitzbergen—Impossible under Existing Conditions—Heat, Light, and Actinism—Invariability of Earth's Axis—Causes of Higher and more Uniform Temperature—Cooling of the Earth—More Heat from the Sun—Warmer Regions of Space—More Carbonic-dioxide—Would not explain Uniformity of Temperature—Excess of Oxygen—Modification of Species—Configuration of Sea and Land—Croll's Theory—Displacement of Earth's Axis—Inclination of Axis of Planets and Moon—Unsolved Problems of the Future. *Page 35.*

CHAPTER IV.

THE GLACIAL PERIOD.

Importance of Date of Glacial Period—Its Bearing on Origin of Man—Short Date Theories—Prestwich says 20,000, Lyell 200,000 Years—Croll's Theory—Prestwich's Arguments—Solar Heat—Human Progress—Shown by Palæolithic Remains—Geological Evidence—Advance of Greenland Glaciers—Denudation—Erosion of Cliffs and Valleys—Deposition—Loëss—Elevation and Depression of Land—All show Immense Antiquity—Post-Glacial Period—Prestwich says 8000 to 10,000 years—Mellard Reade 60,000—His Reasons—Inconsistent with Short Date Theories—Causes of Glacial Period—Cooling of Earth—Cold Regions of Space—Change of Earth's Axis—More Vapor in Atmosphere—Lyell's Theory, Different Configuration of Sea and Land—Conditions of Glaciation—Problems Pressing for Solution *Page 44.*

CHAPTER V.

TERTIARY MAN.

Antiquity of Man—Man part of Quaternary Fauna—What this Implies—Historical and Neolithic Periods—Palæolithic—Caves and River Gravels—Glacial and Inter-Glacial Deposits—Wide Distribution of Palæolithic Implements in Early Quaternary Deposits—Origin of Species—Evolution and Migration—Diversity of Human Types—Objections to Tertiary Man—Specialization of Type—Survival through Vicissitudes of Climate—Positive Evidence for—St. Prest—Thenay—Tagus Valley—Monte Aperto—Cuts in Bones of *Balæonotus*—*Elephas Meridionalis* and *Halitherium*—Auvergne Worked Flints in Pliocene Tuffs—Castelnedolo—Human Bones in Pliocene—Olmo—Evidence from America—Californian Auriferous Gravels—Tuolumne and Calaveras Skulls—Age of Gravels—Skertchley's Stone Implements—Brazilian Caves—Pampæan Strata—Summary of Evidence. *Page 59.*

CHAPTER VI.

THE MISSING LINK.

Human Origins—Evolution or Miracle—First Theories Miraculous—Conception of Natural Law—Law proved to be Universal in Inorganic World—Application to Life and Man—Darwin and Evolution—Struggle for Life and Survival of the Fittest—Confirmed by Discovery of Missing Links—Professor Cope's Summary—M. Gaudry—Instances of Missing Links—Bears and Dogs—Horse—Pedigree of the Horse from *Palæotherium* and *Eohippus*—Appearance and Disappearance of Species—Specialization from Primitive Types—*Condylarthra*—Reptiles and Birds—Links between other Genera and Orders—Marsupials and Mammals—*Monotremata*—*Ascidians* and Fish—Evolution of Individuals and Species from Primitive Cell—Question of Missing Links applied to Man—Man and Ape—Resemblances and Differences—Specialization of Human Type—For erect posture—How Man differs from Animals—Mental and Moral Faculties—Language—Tools—Progress—Mental Development—Lines of Research for Missing Links—Inferior Races—Fossil Remains—Point in direction of Tertiary Origin *Page 81.*

CONTENTS.



CHAPTER VII.

ANIMAL MAGNETISM AND SPIRITUALISM.

Binet and Féré's Volume—School of Salpetriere—Dr. Braid—Hypnotism—
How Produced—Effects of—Lethargy—Catalepsy—Somnambulism—
Hallucination—Dreams—Hypnotic Suggestion—Instances of—Visible
rendered Invisible—Emotions Excited—Acts Dictated—Magnet—Trance
—Alternating Identity—Thought Reading—Clairvoyance—Spiritualism
—Slate Writing—Scybert Commission—All Gross Imposture—Dancing
Chairs and Tables—Large Field opened up by French Investigations—
Point to Materialistic Results *Page 99.*

CHAPTER VIII.

THE RELIGION OF THE FUTURE. AGNOSTICISM AND CHRISTIANITY.

PART I.

Are they reconcilable—Definitions of Agnosticism and Christianity—Chris-
tian Dogma—Rests on Intuition, not Reason—Descartes, Kant, Coleridge
—Christian Agnostics—Tendency of the Age—Carlyle, George Eliot,
Renan—Anglican Divines, Spurgeon—*Robert Elsmere* . . *Page 114.*

CHAPTER VIII. (*continued*).

PART II.

Effect on Morals—Evolution of Morality—Moral Instincts—Practical Religion
—Herbert Spencer and Frederic Harrison—Positivism and the Unknow-
able—Creeds and Doctrines—Priests and Churches—Duty of Agnostics
—Prospects of the Future *Page 122.*

CHAPTER VIII. (*continued*).

PART III.

Practical Philosophy—Zoroastrian Theory—Emerson on Compensation—Good
and Evil—Leads to Toleration and Charity—Matthew Arnold and Philis-
tinism—Salvation Army—Conflict of Theology and Science—Creed of
Nineteenth Century *Page 132*

CHAPTER IX.

THE HISTORICAL ELEMENT IN THE GOSPELS.

Huxley and Dr. Wace—Sermon on the Mount, and Lord's Prayer—English
and German Biblical Criticism—Papias—His Account of Origin of the
Gospels—Confirmed by Internal Evidence—Commonsense Conclusions—
Miracles a Question of Faith—Evidence Required—The Ascension—
Early Christian and Mediæval Miracles—St. Thomas-à-Becket—Faith—
Historical Element—Virgin Mary—Guiding Principles of Historical In-
quiry—Minimum of Miracles—Admissions which tell against—Jesus an
Historical Person—Born at Nazareth—Legends of Nativity—St. John the
Baptist—Kingdom of God—Socialistic Spirit—Pure Morality—Nucleus
of Fact in Miracles—Precepts and Parables—Disputes with Scribes
and Pharisees—Jesus a Jew—Messiahship—Dying Words—Passion
and Crucifixion—Improbabilities—Pilate—Resurrection—Contradictions—
Growth of Legend—Probable Nucleus of Fact—Riot in the
Temple—Return of Disciples to Galilee—Conflicting Accounts of Res-
urrection—Return of Apostles to Jerusalem and Foundation of Christian
Church *Page 137.*

CHAPTER X.

SCEPTICISM AND PESSIMISM.

Carlyle—Causes of Pessimism—Decay of Faith—A Prosaic Future—Denial of these Charges—Definition of Scepticism—Demonology—Treatment of Lunatics—Witchcraft—Heresy—Religious Wars—Nationality has superseded Religion—Wars more Humane—Originality of Modern Events and Characters—Louis Napoleon—Bismarck—Gladstone—Parnell—Abraham Lincoln—Lord Beaconsfield—Darwin—Huxley—Poetry—Fiction—Painting—A Happier World Page 164.

CHAPTER XI.

CREEDS OF GREAT POETS.

What is a Great Poet—Ancient and Modern Poets—Byron, Shelley, Swinburne, Browning, Pope, Dryden, Coleridge, Spenser—Chaucer—Wordsworth—Nature—Worship—*Ode on Immortality*—Byron and Shelley—Burns—Gospel of Practical Life—Shakespeare—Self recorded in Hamlet and Prospero—The Sonnets—Views of Death—Behind the Veil—Prospero—Views identical with Goethe's *Faust*—And with the Maya or Musiar of Buddhism—Pantheism—Ignoring of Religion—Patriotism and Loyalty his ruling Motives—Practical Influence of Religion Exaggerated—Religious Poets—Dante—Milton—Contrast between Greek Tragedy and Modern Poetry—Tennyson—Poet of Modern Thought—*In Memoriam*—Practical Conclusions Page 182.

CHAPTER XII.

ARMED EUROPE.

Exhibition in Hyde Park—Predictions of Peace—Era of Great Wars—Increase of Armies—Difficulty of Disarmament—Diplomacy—Crimean War—Franco-Italian and Franco-German Wars—Results—Spirit of Nationality—France the Disturbing Element—England's Foreign Policy—Austria's Danger—Decay of Turkey—Its Inheritance—Possible Solutions—Constantinople—Balkan States—Russia's Policy Page 200.

CHAPTER XIII.

TAXATION AND FINANCE.

New Departure in Finance—Increased Armaments—Foreign Policy and Finance—Russia and France—Policy of England—Home Defence—Army and Navy—Treasury responsible—How Budgets are framed—National Debt—Unpolitic to reduce Debt by under-insuring—Inefficient Administration—Want of Clear Responsibility—Incidence of Taxation—Proportions paid by Property and Labor—Unearned Increment—Income-tax—Succession Duty—Lines of Budget of the Future Page 214.

CHAPTER XIV.

POPULATION AND FOOD.

Malthusian Theory—Seems Self-evident—But is Contradicted by Experience—England—United States—Canada—Reserves of Wheat-growing Land—Increase of Urban and Industrial Population—Emigration—Working of Malthus' Law—Prospect of Increasing Supply of Food in Old Countries—Checks on Population—Wars—Pestilence—Famine—Example of Ireland—England Safe for the Present—Free Trade and Competition—Cannot go on Indefinitely—Prospects for Future Generations—It is a "Problem of the Future." Page 228.



AND ESSAYS

INTRODUCTION

"Men, my brothers, men the workers, ever reaping something new,
That which they have done but earnest of the things that they shall do."

TENNYSON'S *Locksley Hall*.

THE traveller in the Alps, after struggling up through dense fir woods, in which his view is limited to a few yards, emerges on grassy slopes, where swelling ridges and rocky peaks appear to bound the horizon. Weary and scant of breath, he thinks if he can surmount these his labor will be ended, and a free view enjoyed, with nothing but the vault of heaven above him. But no! when these heights are scaled, he sees before him ridge behind ridge of loftier summits, and in the background of all, the glittering peaks of Jungfrau and Matterhorns, standing out white and seemingly inaccessible, against the deep blue sky.

But if he is a practical mountaineer he knows that, grim as are the glaciers and precipices which girdle their icy fortresses, they are not invincible to human effort; and as the foot of man has stood on some of the loftiest summits, he feels assured that it will stand on those which remain unscaled.

So it is with modern science. For centuries it had to grope its purblind way through dense jungles of superstitious ignorance, where misty shapes of theological and metaphysical speculation obscured the real facts of the universe, or were mistaken for them. At length, and comparatively quite recently, the human intellect emerged into the light of day, and gaining the first heights, began to acquire accurate ideas of the true laws and constitution of the universe. The progress, once begun, went on at an accelerated rate, until in the last half century it has carried with it in an impetuous torrent old creeds and cherished convictions, like so much drift-wood floating on the surface of Lake Erie, when caught by the current which hurries it down the Falls of Niagara.

So irresistible and so wide-spread has been the advance of science, that at first sight we are perhaps disposed to overrate it, and to fancy, like

Alexander, that no more worlds remain to conquer, or that, at most, a few unimportant territories are still unannexed. But the true man of science knows differently. He sees ridge still rising behind ridge, and at every step wider horizons opening, with distant peaks that still baffle the boldest climber.

But he no longer gazes at them with aimless wonder, or if he fails to understand them, invents a high-sounding phrase to disguise his ignorance. His faith is firm in the laws of Nature, and he feels assured that whatever lies within their domain is discoverable, and will, sooner or later, and probably sooner rather than later, be discovered.

In former works I have attempted to give some popular view of what modern science has actually accomplished in the domains of Space, Time, Matter, Energy, Life, Human Origins, and other cognate subjects. In this, I will endeavor to point out some of the "Problems of the Future," which have been raised but not solved, and are pressing for solution.

In both cases I address myself to what may be called the semi-scientific reader. The advanced student of science will find little which he does not already know. Those who are ignorant of the first elements of science, and, like Gallio, care for none of these things, will scarcely understand or feel an interest in the questions treated of. But there is a large, and I believe rapidly increasing class, who have already acquired some elementary ideas about science and who desire to know more. Curiosity and culture are in effect convertible terms: the wish to know is the first condition of knowing. To many who are in this stage of culture, but who have neither the time nor faculty for following up closely the ever-widening circle of advanced thought, it may be interesting to get some general and popular idea of some of the unsolved problems which have been raised by modern science, and are occupying the thoughts of the men who lead its van.

In selecting a few among the many questions which have been thus raised, I have been guided by this principle. In the course of nature I must have left this earth before they have been solved. If the option were given me of paying it a short visit fifty or a hundred years hence, what are the questions which I should ask with the most eager curiosity, and to which I should expect to get a satisfactory reply?

They are partly scientific questions, respecting the age of the earth, the constitution of the sun and solar system; the ultimate nature of matter and energy, the beginnings of life, the origin and antiquity of man; partly religious, social, and political questions which are looming on the horizon and engaging the attention of thinking men.

I do not pretend to have exhausted the list, but I hope I may have done something to give definiteness and precision to the ideas of some of the educated public who are not specialists upon various questions which are now pressing forward and waiting for solution.



CHAPTER I

SOLAR HEAT

ONE of the most interesting and perplexing scientific problems of the day is that raised by the conflict between physicists and geologists as to the duration of solar heat.

Leading mathematicians, such as Sir W. Thomson and Helmholtz, assign twenty, or more probably, ten millions of years as the outside possible past duration of a supply of heat from the sun, sufficient to maintain the earth under conditions enabling it to support life. Lyell, and a majority of the best geologists, consider that one hundred to two hundred millions of years are required to account for the undoubted facts of geology since life began. Each side support their case by arguments, which, taken by themselves, seem conclusive. And yet the gap between the two is so wide that it cannot be bridged over by mutual concessions, and it is evident that there must be some fundamental error in the assumed data on one side or the other.

The mathematicians base their argument on the supply of solar heat. They say the present amount of heat radiated by the sun is a measurable quantity ; the principle of the conservation of energy shows that this heat cannot be self-supplied, but must be a transformation of pre-existing energy ; the only sufficient energy we know of is that of the mechanical force generated by the contraction of the sun as it cools. This, again, is a measurable quantity, and the outside amount of mechanical power generated by contraction of the sun's mass to its present volume by gravity, would not supply the present amount of heat for more than twenty millions, or more probably for more than ten or fifteen millions of years.

This forms a chain of reasoning, every link of which seems to be solidly welded. Let us examine each link in detail. The amount of solar heat received at the earth's surface has been carefully measured by Herschell, Pouillet, and other eminent observers, the principle being to intercept a beam of sunshine of known dimensions, and make it give up its heat to a known mass of water or other substance, measuring accurately the rise of temperature produced in a given time. The result is this : the heat, measured by Calories, or units of heat sufficient to raise the temperature of one kilogramme of water one degree Centigrade, received per minute by one square metre exposed perpendicularly to the sun's rays

at the upper surface of the atmosphere, ranges from Pouillet's estimate of 17·6 to that of Forbes' 28·2 Calories, the difference arising mainly from the different allowance made for absorption by the atmosphere, and the highest estimate being proved by Langley's observations at a high altitude to be the most reliable.

From this it is easy to calculate the amount of heat received by the earth from the sun in a given time. Herschell puts it in this striking way. The amount of heat received on the earth's surface, with the sun in the zenith, would melt an inch thickness of ice in two hours and thirteen minutes. But, if it be assumed that the sun radiates heat equally in all directions, the earth intercepts only an almost infinitesimally small amount of this heat. In fact, only the proportion which the earth's surface bears to the surface of a sphere whose centre is in the sun, and its radius the distance of the earth from the sun, or about ninety-three millions of miles. This proportion is $\frac{1}{2\,200\,000\,000}$. But even this minute fraction is sufficient to melt yearly, at the earth's equator, a layer of ice of more than one hundred and ten feet thick. So, as Sir W. Thomson puts it, if the sun were a mass of solid coal, and produced its heat by combustion, it would burn out in less than six thousand years. Of course this calculation depends on the assumption that the sun radiates heat equally in all directions into space. It is difficult to conceive how this can be otherwise, for, as far as we know, all heated bodies at the earth's surface do so, and all impulses which cause waves in an elastic medium, such as we know to be the case with heat and light, propagate these waves in all directions.

Assuming therefore that the sun gives out this enormous amount of heat, where does it come from, and how is the supply kept up, uniformly or nearly so, for millions of years? The law of the conservation of energy says, in effect, that something cannot be made out of nothing, and that all special forms of energy, such as heat, light, electricity, and mechanical power, are convertible into one another, and are simply transformations of one original fund of energy. If so, the sun's heat must be kept up by energy transformed into heat from some other form. It cannot be from combustion, which is a chemical action, for we have seen that a sun of solid coal would be burned out in six thousand years. It must be from mechanical force, which we know as a fact to be convertible into heat in a definite and ascertained proportion.

Now what are the sources of mechanical power known in the case of the sun? Two—the impact of aerolites, and the shrinkage of the sun as it contracts, which latter resolves itself into an effect of gravity.

Both are real causes. Aerolites fall on the earth and generate heat, the smaller ones, or shooting stars, being set on fire and burnt up by the friction of the atmosphere; the larger ones reaching the earth in masses of stone, singularly like those ejected from deep-seated volcanoes, and with their surfaces glazed by intense heat. If such meteors fall on the earth, it is reasonable to suppose that vastly more must fall on the sun, with its

vastly greater surface and attracting power. And it is to be noted that comparatively small masses might generate large amounts of heat, for the amount of mechanical force, and therefore of heat, generated by arrested motion, increases with the square of the velocity. A body weighing 8·339 kilogrammes falling from a height which gave it a velocity of one metre per second, would generate one calory of heat, or enough to raise the temperature of one kilogramme of water by 1° Centigrade. But the same body moving with the velocity of a cannon-ball, or 500 metres per second, would generate two hundred and fifty thousand times as much heat; and if moving with a velocity of 700,000 metres per second, which is about the velocity with which a body would fall into the sun from the distance of the earth, the heat produced would be nearly two million times as great.

Sir W. Thomson has calculated that a quantity of matter equal to about one-hundredth of the mass of the earth falling annually with this velocity on the sun's surface, would maintain its present radiation indefinitely. It is clear therefore that if this amount of meteoric matter really falls on the sun its heat might be maintained. But many objections have been raised to such a supposition.

To explain the sun's heat we must have a cause that is not only sufficient to generate its total amount, but also one which generates it uniformly. If the sun were a target kept at an intense white heat by showers of meteoric small shot peppering into it, how is it that this stream of small shot is incessant and uniform?

Only small portions of the total meteoric mass revolving round the sun can be captured by it gradually, as their orbits are contracted. An extra supply, as some solid body or enormous comet with its attendant meteoric train falling into the sun, would raise its temperature above, while a deficient supply would lower it below the average, and a comparatively slight variation in the sun's temperature would destroy existing conditions of life on the earth.

Another objection to the meteoric theory is, that it would require such a large mass of meteoric matter revolving in space as might be expected to exercise a perceptible effect on the motions of the planets, both by the law of gravity and by the retardation due to a resisting medium. And this is specially true of the orbits of comets which approach the sun very closely. As meteors do not fall from a state of rest straight into the sun, but revolve around it with planetary velocities, they can only fall into it by being drawn inwards in gradually contracting spirals, until they reach a point where they impinge on the sun or its atmosphere. Hence a vastly greater amount of meteoric matter must be revolving round the sun in the space near it, than can be captured and generate heat in any single year. But several comets are known to almost have grazed the sun's atmosphere, and emerged from it to continue to describe their elliptic orbits and return true to time, as predicted by calculations based on the known laws of

gravity acting on them from the sun and planets alone, in a *non-resisting* medium.

Consider what this means. Comets are bodies of such immense volume and extreme rarity that one of them got entangled among Jupiter's satellites and thrown out of its course, without affecting in the slightest perceptible degree the motions of those satellites. How could such comets, rushing closely round the sun with enormous velocities, avoid showing perturbations, if they encountered any considerable mass of meteoric matter?

The theory of meteorites, to which reference will be made in a future chapter, meets many of these difficulties, and strengthens the case for a meteoric origin of a large part of solar heat, but it hardly accounts for the uniformity of the supply, and is hardly yet so generally accepted as to supersede the older theory that the main source of the sun's heat is to be sought in the transformation of the mechanical energy of gravity, as its volume contracts.

Assuming this theory, the principle on which the supply of solar heat is calculated is the following. We know the amount of heat given out by each square metre of the sun's surface, and we know the height from which a given weight must fall to generate this heat when its motion is arrested. We know also that this heat will be the same whether the motion is suddenly or gradually arrested. Now in this case the given weight is that of a long narrow cone of matter, whose base is one square metre at the sun's surface, and its apex a point at the sun's centre. Knowing the sun's diameter and mean density, it is easy to calculate the weight of such a cone if we suppose it to be solid. Its weight is equivalent to that of 244,000,000 tons of solar heaviness at the sun's surface. To reduce this to terrestrial tons, and their equivalent in horse-power, we must allow for the difference of weight or gravity, at the respective surface of the sun and earth.

Reduced to terrestrial figures, in which one horse-power is 270 metre-tons per hour (*i.e.* a ton lifted 270 metres in an hour), the horse-power at the sun's surface is 10 metre-tons. But the radiation from each square metre of the solar surface in heat per hour is equivalent to 78,000 horse-power in energy, or to that of 780,000 metre-tons. An easy calculation shows that to supply energy at this rate for a year, our supposed cone of 244,000,000 tons must fall one metre in 313 hours, or about 35 metres in a year. Refined mathematical calculations are requisite to show how this result is effected, if we suppose, as is probable, that the mass of matter forming the sun, instead of being solid, existed first in the nebulous or gaseous state, and gradually contracted into a fluid mass in which convection currents are constantly carrying down surface layers which have become cooler by radiation, and replacing them by ascending currents from the hotter and denser interior. These calculations have been made by mathematicians of undoubted competence, with the result that the

dynamical equivalent of the heat radiated from the sun in a given time is practically the same as if it were solid.

This result shows that if the sun has contracted to its present size, from a volume extending far beyond the orbit of the remotest planet, Neptune, it has furnished about eighteen million times as much heat as it now supplies in a year; and that with its present dimensions it must contract at the rate of 35 metres per year, or one per cent. of its radius in 200,000 years.

Allowing for the increasing density of the sun as shrinkage proceeds, the problem works out that if the sun's radiation of heat has been uniform for the last fifteen millions of years, the solar radius must then have been four times greater than it is now; and that if the present supply were maintained by shrinkage alone, for the next twenty millions of years, the sun must have shrunk to half its present size. But these figures must be greatly reduced by several considerations. They are based on Herschell's and Pouillet's figures for the total activity of solar radiation, but Forbes and Langley have shown that the allowance made for absorption of solar heat by the earth's atmosphere was insufficient, and that the real amount of heat radiated by the sun is greater than was supposed by Pouillet in the ratio of 1·7 to 1. This diminishes the past and future periods of solar radiation in the same proportion, reducing the past period from fifteen to nine millions of years, and the future from twenty millions to twelve. Moreover, when the sun's surface was four times larger, it must have given out more heat than at present, and more than existing conditions of life in geological times could support. If, therefore, the sun's shrinkage from gravity has been the sole or principal source of its supply of heat, it is difficult to see how life and the existing order of things on the earth can have lasted for more than ten millions of years at the outside.

So far the mathematicians seem to have it all their own way, and, as often happens when the plaintiff's case only has been heard, it seems to be conclusive. But what say the defendants—the geologists? They also base their case on an undoubted principle, and on undeniable facts. The principle is that of the uniformity of existing causes; the facts, those of actual experiment and observation.

Geology, in the pre-Lyellite days, passed through two stages, the theological and the theologico-scientific. The theological, which prevailed universally until the present century, was based on the belief that the book of Genesis, instead of being a sort of poetical prelude to a collection of ancient writings of religious and moral import, was a strictly literal and scientific narration of what actually took place, every word of which was imparted by a Divine revelation, which it was impious to explain away or to dispute. Geology was therefore confined very much to searching for facts in Nature confirming this narrative. Thus when fossil-shells were observed on mountain-tops, they were adduced as incontrovertible proofs

of Noah's deluge; and even a sceptical and encyclopædic mind like that of Voltaire could only attempt to palliate this proof by suggesting that the shells were dropped from pilgrims' hats while crossing the Alps on their way to Rome. The period when such a ridiculous suggestion could be made by an accomplished scholar seems thousands of years from us, and yet it occurred in the last century. The naïve and infantile narrative of the Noachian deluge is now taken no more seriously than are the little wooden arks, with their contents of pigmy animals, which with other toys amuse the nursery.

The next stage was what may be called the theologico-scientific, when the facts and laws of Nature began to be recognized; but the old dogmatic faith was still so prevalent, that these facts and laws were viewed through a theological medium, and attempts were made to reconcile the Bible and science, by distorting the conclusions of science, and giving the statements of Genesis a general and allegorical, rather than a literal meaning. This was the era when days were expanded into periods, universal deluges contracted into local floods, and when miraculous catastrophes and creations were invoked *ad libitum*, to bring geological and zoological facts into some sort of possible accordance with the non-natural versions of plain words into which Scriptural texts were evaporated. This school included, in its time, some eminent men, such as Buckland and Hugh Miller, and it still lingers on the outskirts of science, as may be seen by Mr. Gladstone's essay on the *Proem to Genesis*. But with all the leaders of science it is quite extinct, and the prevailing tone of thought has become Darwinian, as universally as a century ago it was theological. Differences may exist as to the details of Darwin's theory, and the extent of its application in some of the more recondite causes of variation, but no one of any authority in science doubts that evolution, under fixed laws, is the key to the secrets of the universe, and that one original impress, and not perpetual miracle, or secondary interference, has been the real course of Nature.

In geology this conviction has been embodied in what is known as Lyell's Law of Uniformity. If any one wants to get a clear idea of what this means, let him go to the British Museum and look at a slab of sandstone from the Silurian formation. He will see precisely what he may see to-day on the sands of Southend or Margate. Ripple marks of a gently flowing or ebbing tide, worm castings, or even little pits showing where rain-drops had fallen on the wet sand, and these pits higher on one side than the other, showing the size of the drops, the force of the wind, and the direction from which it was blowing. The inference is irresistible that at this immensely remote period the winds blew, the rain fell, the tides ebbed and flowed, sand-banks were formed, and worms or sand-eels burrowed in them, as they do at the present day. Or look at a piece of chalk through a microscope, and you will find it mainly composed of the microscopic shells of a minute form of animal life, the *Globigerina*, which,

gradually falling to the bottom of a deep ocean like the finest dust, have accumulated more deep than a thousand feet in thickness. Precisely the same thing is going on in the Atlantic to-day, where deep-sea dredgings bring up a *Globigerina* ooze, which affords a safe bed for the submarine telegraph. Or take another instance. A shell called the *Lingula*, about the size of a small mussel, is found abundantly in the Silurian, and even in the earlier Cambrian formations; and another shell, the *Terebratula*, in the Devonian. Both are found living at the present day, not only of the same genus, but identically of the same species. It is evident that no great change can have taken place in the conditions of oceanic life since these mollusks lived and flourished in Silurian and Devonian seas.

Nor can the condition of the atmosphere have greatly changed since the time of the air-breathing Silurian scorpion, whose fossil remains show him to be scarcely distinguishable from the present scorpion.

In fact, the atmosphere affords one of the most conclusive proofs of the uninterrupted maintenance of existing conditions during an enormous period. When we say enormous time, the term is used with reference to any recent or historical standard as applicable to the period when geology practically commences; that is, with the first dawn of life disclosed by fossils in the Cambrian era, or beyond that with formations like the Laurentian, which can be clearly proved to be sedimentary and metamorphic. But no geologist ventures to extend this doctrine of uniformity beyond the date when fossils appear, or to deny that though the laws of Nature are the same, the conditions must have been totally different in the earlier stages of the planet, when it was cooling and condensing into its present form. Nor could he deny that, even within this comparatively recent period, there may have been changes of existing conditions, as we know indeed from the alterations between the Glacial period and those of higher and more uniform temperature. But his position is that such changes have been of the same order, and owing to similar causes as those which now prevail; and that when a known cause, given a sufficient time, will produce an effect, it is unphilosophical to assume miracles, catastrophes, or a totally different order of things, in order to reduce the time to some procrustean standard of theoretical prepossession.

To Sir C. Lyell belongs the credit of having established this doctrine of uniformity on an unassailable basis, and made it the fundamental axiom of geological science. By an exhaustive survey of the whole field of geology, from the earliest formations in which life appears, down to the present day, he has shown conclusively that while causes identical with, or of the same order as, existing causes, will, if given sufficient time, account for all the facts hitherto observed, there is not a single fact which proves the occurrence of a totally different order of causes. This, of course, applies only to the geological record commencing with the commencement of organic life on the earth, and not to the earlier astronomi-

cal period when the planet was condensing from nebulous matter, and slowly cooling and contracting. Nor does it imply absolute uniformity with existing conditions, for changes in climate, temperature, distribution of sea and land, and otherwise, have doubtless occurred from the slow operation of existing causes. But it excludes all fanciful theories of cataclysms, annihilating each successive era with its life, and introducing a new one; earthquakes throwing up mountain chains at a shock; deluges sweeping over the face of the earth, and so forth, in which even eminent geologists used to indulge thirty or forty years ago. While no competent geologist of the present day would like to affirm positively that there may not have been, in past ages, explosions more violent than that of Krakatoa, lava streams more extensive than that of Skaptar-Jokul, and earthquakes more powerful than that which uplifted five or six hundred miles of the Pacific coast of South America six or seven feet, it may be doubtful if he could point out a single instance since the Silurian epoch where such was demonstrably the case.

Assuming the principle of uniformity, the time requisite to explain the facts of geology becomes a matter for approximate calculation. Not readily in years or centuries, for our historical measuring-yard does not extend beyond seven thousand years, when we find a dense population and high civilization already existing in Egypt; but in periods of which we can form some approximate idea.

To understand the full force of the evidence, it is necessary to study carefully the works of Lyell, Croll, Geikie, and other authorities on geology; but some idea of the sort of periods which are required for gauging Time back to the commencement of life may be arrived at from a few instances.

The tests of geological time are mainly from two sources—denudation and deposition. The present rate of denudation of a continent is known with considerable accuracy, from careful measurements of the quantity of solid matter carried down by rivers. The Mississippi affords the best test, both because the measurements have been made with the greatest accuracy, and because the conditions of the vast area drained by it and its tributary rivers afford a better average of the rate of continental denudation, including as it does a great variety of climates and geological formations, and being singularly free from exceptional influences. The rate thus deduced is one foot from the general surface of the basin in six thousand years. Now the measured thickness of the known sedimentary strata is about 177,000 feet. The proportion of sea to land is three to one, and the bulk of the deposition of the waste of land must have been laid down within a comparatively narrow margin of the sea nearest to land. On these data Wallace calculates that the time required to deposit this 177,000 feet would be 28,000,000 years, taking the rate of denudation at one foot in 3000 years, or 56,000,000 years, taking the rate deduced from the Mississippi. But it must have been more than this, for

the stratified rocks are to a great extent composed of the *débris* of older strata, which have been deposited, upheaved, and again denuded. Most of the known stratified rocks must have been in this way denuded and deposited many times over. Nor is there any good reason for supposing that the rate of denudation was materially greater in former, than in recent geological eras. On the contrary, the recent Glacial period, by grinding down solid rock into loose materials, and, as the ice and snow melted, causing more torrential inundations of rivers, must have tended to accelerate denudation.

Another proof of the enormous amount of solid rock which has been removed by denudation, is afforded by the faults or cracks in the earth's crust, which have in many cases displaced strata by thousands of feet, all traces of which displacement have been subsequently planed down to one uniform surface. Thus the great fault which separates the Silurians of the south of Scotland from the Devonian and Carboniferous region to the north of it, is estimated by the Geological Survey at 15,000 feet. A mountain mass of this height, terminating in a steep cliff at the fault, must have existed to the south of it, composed mainly of the Devonian strata which now stop abruptly at the north edge of the fault. At present there is no inequality of the surface at the fault, and therefore 15,000 feet or nearly three miles of rock must have been removed by denudation. And what is most important, the time in which this denudation was effected is fixed as having occurred in the interval between the Devonian and Carboniferous periods, for while no trace of the former formation is found south of the fault, the limestones and coal-measures of the latter lie directly on the Silurian rocks. At the rate of denudation deduced from the Mississippi observations of one foot in 6000 years, the removal of those three miles of rock would have required 90,000,000 years for the interval between two of the geological formations.

Croll, in his recent work on Stellar Evolution, gives a number of similar instances, one in the Appalachian Mountains, in which the vertical displacement is not less than 20,000 feet, bringing the upper Devonian strata on one side opposite to the lowest Cambrian on the other. Of course we cannot assume these enormous intervals of time to have actually occurred, but they are quite sufficient to show the absolute impossibility of reconciling geological facts with any estimate of the duration of solar heat derived from the theory of contradiction by gravitation.

Take another instance from a more recent period. There is a dried-up Eocene lake in North America, which once occupied an extensive area in the States of Wyoming and Nebraska, formed by streams running down from the Wahsatch, Uintah, and other mountain ranges, which are Eastern outliers of the great backbone of the continent—the Rocky Mountains. It was gradually silted up by a deposit of more than 5000 feet, or a mile thick of clays and sands, a portion of which has since been carved by the rain and weather into the singular formation of isolated castle-like

bluffs and pyramids, known as the "bad lands." It is full of remains of Eocene animals, often of huge size and of a peculiar type. How long must it have taken to silt up a lake larger than Lake Superior, with tranquil deposits to fine mud and sand? The nearest approximation towards such a calculation is afforded by the silting up of the Lake of Geneva. Swiss geologists have calculated from the rate of advance of the delta in historical times, that it may have taken 90,000 or 100,000 years since the silting process began, which could only be after the first Rhone glacier, which once extended to the Juras, had shrunk back to the head of the lake. This calculation may be right or wrong, but certainly a vastly longer time must have been required to silt up a vastly larger lake to a depth of 5000 feet. And if anything, one would expect the process of silting up to have been slower, for in the Eocene period there were no glaciers, or melting snow-fields, to accelerate the denudation which must have gone on *pari passu* with the deposit. If we consider the geological evidence more in detail, we find it all pointing to the same conclusion of immense antiquity.

Thus, if we take the coal-measures which form only a part of one formation—the Carboniferous. Each seam of coal consists of the consolidated *débris* of a forest. With every seam there is an under-clay in which the trees and ferns grow; and a roof of shale or sandstone deposited on it when this floor was submerged. The bulk of the coal is frequently composed of the microscopic spores of the ferns and club-mosses which formed the principal vegetation of these forests. The time required is therefore that for the accumulation of vegetable matter, consisting mainly of fine spore-dust, to a depth sufficient, under great compression, to give the seam of solid coal. In Nova Scotia, and other localities, the coal-measures have a thickness of 12,000 feet, made up of seam upon seam of coal, each with its under-clay and roof, implying a separate growth, submergence, and elevation.

Sir J. Dawson and Professor Huxley, who have studied the subject minutely, calculate that the time represented by the coal-measures alone would be six millions of years. In other words, the time required for this one subordinate member of one geological formation, would be half the total time assigned by Thomson and Helmholtz for the total possible past duration of the present supply of solar heat.

Those who fully consider and appreciate any one of these instances will not be astonished to hear that Sir C. Lyell, after carefully going over and summing up the various lines of evidence afforded by the 100,000 feet of stratified and fossiliferous formations above the Cambrian, came to the conclusion that two hundred millions of years was the probable, and one hundred millions the *minimum* possible duration of the existing order of things that would explain the facts. And all subsequent discoveries, and the best geological opinions, go to confirm this estimate. Thus, when Lyell made his estimate, the great Laurentian system of gneissic and

other rocks which underlie the Cambrian was scarcely known, or assumed to be a primitive portion of the earth's crust of Plutonic origin. But it is now clearly proved to be bedded, and therefore an aqueous deposit from the denudation of older rocks, though the minor signs of stratification have disappeared, owing to metamorphism under heat and pressure. This at once adds 30,000 feet to the known thickness of deposited strata. It is not positively known to have contained life, for with the doubtful exception of the *Eozoon Canadiense*, the fossils, if any, have disappeared during this process of metamorphism; but it contains indirect evidence of life on the most extensive scale. Thus, great quantities of graphite or plumbago are found in it, and as ordinary coal can be traced first into anthracite and then into graphite, the inference is strong that the Laurentian graphite must, like coal, have originated from masses of vegetable matter. It contains also great beds of limestone, similar to those which, in later formations, are known to have originated from the remains of corals and other hard parts of marine animals, which derived their skeletons from calcareous matter dissolved in sea-water. Large beds of iron ore are also found, which, in later formations, owe their origin to the solution of peroxide of iron and its deoxidation by organic agency. There is thus, therefore, evidence of the existence of life on a vast scale in this lowest of all formations, which of itself adds more than a fourth to the thickness of the whole of the previously known deposited strata of the earth's crust, and therefore to the time presumably required for their deposit.

And yet, as we have seen, mathematicians affirm with equal confidence that Lyell's figures must be divided by at least ten, or probably by twenty, to arrive at the ten millions of years which is their estimate of the time for which the sun has given out its present life-sustaining amount of light and heat, and this short period has to provide not only for geological time, but for the far larger time during which the earth was passing through its earlier stages, and condensing from a gaseous vapor.

It is evident that there must be some fundamental error on one side or the other, which some day will be detected, for the laws of nature are uniform, and there cannot be one code for astronomers and another for geologists. I am inclined to think that the error will be found in some of the assumptions of the physicists. The data of geology seem more certain and more capable of verification by an appeal to facts. Thus, the rate at which rocks waste away, and lakes silt up; the amount of solid matter carried down by rivers, and the number of feet or inches per square mile thus denuded in a given time, are all matters of approximate and tolerably accurate observation and calculation. But of the nature and constitution of the sun we really know very little, and are only beginning to get some glimpses of them during the past ten or twenty years by the aid of the spectroscope. The sun, as we see it, is not fluid, for if it were its rotation must make it protuberant at the equator, which it is not. It is not solid, for if it were its equatorial region could not rotate, as it does, more

rapidly than that nearer the pole. We know its apparent volume and its mean density; but we do not know how this density is distributed. The conditions of matter under such extreme temperature and pressure are quite conjectural. For aught we know to the contrary, the sun may have a nucleus much smaller and much heavier than we are in the habit of assuming.

Above all, what makes me distrust these mathematical calculations respecting the sun's heat is, that they do not really solve the problem, but only remove it one step further back. Heat, they say, can be nothing but transformed mechanical power; but where does the mechanical power come from? From gravity. And where does the gravity come from? They cannot tell. It is the old Hindoo cosmogony over again. The world rests on an elephant; the elephant on a tortoise. But what does the tortoise rest on?

We are accustomed to speak of gravity as the one well-known and established fact of the universe. And so it is as regards the various motions which result from it, and the fact of its being an attribute of all matter from atoms to stars. But of its real essence and *modus operandi* we know nothing: less even than in the case of some of the other forms of energy into which it can be transformed. In the case of light, for instance, we know that it is caused by waves or vibrations of an exceedingly elastic and imponderable medium or ether diffused through space. We can measure and count these vibrations, and know the velocity with which the light-wave travels, and trace its effects from impact on the eye, through the retina and optic nerve up to the cells of the brain.

But in the case of gravity we know none of these things, and cannot even form a conception of how one mass of matter can act upon another, without connection and apparently without requiring time for the transmission of the impulse. Is it a pulling or a pushing force? We do not even know this, and are not one whit advanced beyond the saying of Newton that he could not conceive how one body could act on another without some physical connection between them.

It seems to me that Sir W. Thompson starts from the assumption that gravity is the one fundamental form of energy from which all other forms, such as light and heat, are derived by transformation. But what a mere drop in the ocean is the energy of gravity compared with the atomic and molecular energies, which now in a latent and now in an active form build up the universe of matter? How incalculably small must the gravity of the sun be, compared with the sum of the energies of the atoms of which its mass is composed.

If it were permissible to hazard a conjecture where there is no proof, it would be that gravity may turn out to be one, and that by no means the most important, manifestation of the primitive fund of energy, which underlies the atoms of which all matter is composed.

Various ingenious attempts have been made to explain the cause of

gravity, as that of strain or stress of some intervening medium, or space-filling, incompressible fluid; or by Le Sage's theory of infinite impacts of ultramundane corpuscles, partially screened in the direction in which gravity acts by the bodies which attract one another. But Clark Maxwell and other accomplished mathematicians have shown fatal objections to all these theories, and Tait in his *Properties of Matter* sums up the latest results almost in the identical words used by Newton in his letter to Bentley—"In fact, the cause of gravitation remains undiscovered."

Again, who can tell what is the constitution of the infinite space through which our solar system and the universe of visible stars are travelling, with a velocity which has been estimated in some cases as high as two hundred or even four hundred miles per second?

These facts of the proper motions of the stars, and especially of what are known as the "runaway stars," seem conclusive against the assumption that gravity is the sole and primitive form of energy, from which all other forms, such as heat and light, are derived by transformation. These star-motions are apparently in straight lines, in a variety of directions, and the velocities are such that it is impossible to account for them by any conceivable action of the force of gravity. Professor Newcomb has shown by mathematical calculation that the gravitation of the whole universe, assuming it to contain 100,000,000 of stars, each on the average five times larger than the sun, would require to be sixty-four times greater than it really is, to have given one star (1830 Groombridge) the velocity of 200 miles per second which it actually possesses, or to be able to arrest its flight through space. Of course this applies with greater force to a star like Arcturus, moving with a velocity of 400 miles per second. The amount of energy of a star like this, whose volume has been computed to be eleven times greater than that of the sun, moving with a velocity of 400 miles per second, must be enormously greater than any energy exerted by it in the form of gravitation, and if its motion were arrested, the heat engendered must be in an even larger proportion, seeing that it depends on the square of the velocity, than any heat which could be supplied by its gradual contraction, on the theory applied by Thomson and Helmholtz to solar heat.

After all, what do we really know of the contents of space except this, that it contains a vast number of stars which are suns like ours, scattered at enormous distances from one another, and also innumerable meteorites? And also this, that the phenomena of light and heat prove the existence of waves of known dimensions vibrating with known velocities and transmitted at a known rate; which waves compel us to assume a medium or ether with certain calculable qualities. But these qualities are so extraordinary that it may almost be doubted whether such an ether has a real material existence, and is anything more than a sort of mathematical entity. Its elasticity must be a million million times that of air, which, as we know, is equal to a pressure of about 15 lbs. to the square

inch ; the number of its oscillations must be at least 700,000,000,000,000 in one second of time; and it must be destitute of any perceptible amount of the ordinary qualities of matter, for it exerts no gravitating or retarding force, even on the attenuated matter of comets moving through it with immense velocities.

Beyond this we can only conjecture that space may contain a number of larger meteors or dark suns, rushing through it in all directions, and possibly in the state of dissociated atoms the elements of substances such as carbon and oxygen, which are locked up in the earth's crust through the medium of life and vegetation, in vastly greater quantities than could be afforded by any conceivable supply derived from the atmosphere. And it may be conjectured also that variations of temperature may exist in different regions of space, helping to account for the secular variations of temperature at the earth's surface, such as are shown by the Glacial period or periods.

Even if we confine ourselves to the sun itself, leaving these cosmic speculations to be discussed in a subsequent chapter, we find the greatest uncertainty prevailing as to the conditions under which it exerts and generates heat. Thus, Professor Young says, "The sun's mass, dimensions, and motions are, as a whole, pretty well determined and understood; but when we come to questions relating to its constitution, the cause and nature of the appearances presented upon its surface, the periodicity of its spots, its temperature, and the maintenance of its heat, the extent of its atmosphere, and the nature of the corona, we find the most radical differences of opinion."

Take the case of the spots. These were originally attributed by Herschell to cyclones in the sun's atmosphere, showing us glimpses, as through a funnel, of a cool and dark solid body below; by others they have been thought to be splashes caused by the downfall of large masses of meteoric matter; by some to be volcanic eruptions throwing up vast scorix; and finally, as the most probable solution, to be great whirlwinds, or cyclonic convection currents, by which the cooler gases of the sun's atmosphere are sucked down and replaced by hotter gases from the interior. But none of these theories give an explanation of the observed fact that these sun-spots have a regular *maximum* and *minimum* period of about eleven years. Nor do they give the slightest clue to the other remarkable fact that the outburst of large sun-spots often produces an apparently instantaneous effect on the earth's magnetism; causing electric telegraphs to write with a tongue of fire, magnets to oscillate violently, the Aurora Borealis to appear, and otherwise indicating what is known as a magnetic storm.

It is pretty clearly established that the spots are colder than the sun's general surface, but not sufficiently so as to affect its general temperature, or the cause of the seasons upon the earth; but the far more inexplicable

effect upon terrestrial magnetism is attested by too many observations to be at all doubtful.

This opens up a new and quite unexplained field of speculation as to the sun's electric energy. The physicists, who treat the attractive form of gravity as the sole cause of the sun's energy, and convert it all into heat, take no account of the energy which manifests itself as a repulsive force, and takes the form of electricity. And yet electricity is one of the transformable manifestations of energy as much as heat or mechanical power, and the phenomena or comets' tails are sufficient to show that, under certain conditions, the sun can exercise an enormous repulsive force. The question also may be raised whether, after all, it is certain that heat is radiated out in all directions, so that out of 1,000,000 units of the life-giving energy of the sun, 999,999 are absolutely wasted in space, and one only is utilized. Electricity, so far as we know, cannot exist without two opposite poles, implying reciprocal action. Do the sun-spots, which affect the earth's magnetism, radiate out an equal amount of magnetic energy in all directions into space? If not, how can we be sure that heat, into and out of which electricity and magnetism can be transformed, does so?

As Professor Young observes, "perhaps we assume with a little too much confidence that in free space radiation does take place equally in all directions," and he asks "whether the constitution of things may not be such that radiation and transfer of energy can take place only between ponderable masses; and that too, without the expenditure of energy upon the transmitting agent (if such exists) along the line of transmission, even in *transitu*. If this were the case, then the sun would send out its energy only to planets, meteors and sister-stars, wasting none in empty space; and so its loss of heat would be enormously diminished, and the time-scale of the planetary system would be correspondingly extended."

The same difficulty applies in the case of gravity. We only know it as an attractive force reciprocally exerted between two bodies in the proportion of their masses and inverse squares of distances. Is it radiated out in all directions into empty space, where it meets with no reciprocally attracting body? This affects not only the permanent maintenance of the supply of gravity, but goes even deeper to the fundamental axiom of all modern conceptions, whether scientific or philosophical, of the universe, viz., the Conservation of Energy. You cannot make something out of nothing; you cannot *create* energy or matter, but only *transform* them. Good; but how about that which is one of the principal manifestations of energy in the universe—that of gravity? You can catch limited portions of it, transform them into mechanical power, and then backwards and forwards as you like in heat, light, chemical action, electricity and magnetism, neither losing nor gaining a particle of the original energy by any of these transformations. A water-wheel may turn a dynamo, which generates electricity that may be stored in accumulators, and turn a wheel a hundred miles off; and, if you could eliminate waste and friction, the

second wheel would give out exactly what the weight of the falling water put into the first one. But whence came the gravity which made the waterfall and the wheel turn? Was it itself a transformation of heat or electricity? If not, what was it, and how came it there? If Thomson and Helmholtz assume an infinite fund of energy in the form of gravity to account for heat, why shall they not as well assume an infinite fund of heat to account for gravity? And if heat is dissipated by use until it is exhausted, or reduced to one stationary average of temperature, and worlds and suns die, why should gravity be gifted with perpetual youth, and escape the general law of birth, maturity and death?

These are problems which the present cannot answer. Possibly the future may, but in the meantime we shall do well to keep a firm footing on solid earth, and rely on conclusions based on ascertained facts and undoubted deductions from them, rather than on abstract and doubtful theories, even if they are presented to us in the apparently accurate form of mathematical calculation. Or, to bring this chapter to a practical result, we shall be more likely to arrive at just views respecting the constitution of the earth and its inhabitants by following Darwin and Lyell as our guides, than by accepting astronomical theories which would so reduce geological time as to negative the idea of uniformity of law and evolution, and introduce once more the chaos of catastrophes and supernatural interferences.

CHAPTER II.

WHAT THE UNIVERSE IS MADE OF.

WHAT is the universe made of? Such is the question which has been asked in many ages and countries by earnest men looking up at the starry vault of heaven, and down into the recesses of their own minds. The latest reply of science is, that it is made of shooting stars. The idea may seem paradoxical to those whose only knowledge of shooting stars is derived from an occasional glimpse on a clear night, when they have seen something like a small rocket flash across the sky, apparently close to the earth, out of darkness into darkness, reminding them of some human life—

“Qui file, qui file et disparait.”

And yet it is now presented to us by eminent authorities, and supported by a long array of serious scientific arguments.

What do we know as certain facts with regard to shooting stars?

1. They are vastly more numerous than any one has an idea of who has not watched them continuously for many nights. Astronomers who have kept a record for many years assure us that the average number seen by one observer at one place on a clear moonless night is fourteen per hour, which is shown by calculation to be equivalent to twenty millions daily for the whole earth. But the number of meteorites met with by the earth can only be the minutest fraction of those circulating in space. The orbits of those we see do not coincide with the ecliptic, but lie in planes inclined to it at all sorts of angles, and apparently having no relation to the plane in which the earth travels round the sun, or to the solar system. The chances are almost infinite against our minute speck of a planet encountering any single meteor, or stream of meteors, thus traversing space in all directions, and as we do encounter some seven thousand millions of these small bodies in the course of each year, their total number must be an almost infinite multiple of this large figure. Moreover, the sun, with its attendant system, is rushing through space with a velocity of some 20 miles per second, and therefore carrying us into new regions of the universe at the rate of some six hundred millions of miles per annum, and yet meteorites are met with everywhere. Granting, therefore, that each separate meteorite may be very small, not exceeding on the average a fraction of an ounce in weight, and that even in meteor streams they may

be, as some astronomers have calculated, 200 miles apart, the aggregate amount of this meteoric matter in space must be practically almost infinite.

2. They are not terrestrial phenomena moving in the lower atmosphere, but celestial bodies moving in orbits and with velocities comparable to those of planets and comets. Their velocities are seldom under ten miles a second or over fifty, and average about thirty, the velocity of the earth in its orbit round the sun being eighteen.

3. They are of various composition, comprising both a large majority of smaller particles which are set on fire by the resistance of the earth's atmosphere, and entirely burned up and resolved into vapor long before they reach its surface ; and a few larger ones, known as meteors, which are only partially fused or glazed by heat, and reach the earth in the form of stony or metallic masses.

4. They are not uniformly distributed through space, but collect in meteoric swarms or streams, two at least of which revolve round the sun in closed rings which are intersected by the earth's orbit, causing the magnificent displays of shooting stars which are seen in August and November.

5. They are connected with comets, it having been demonstrated by Schiaparelli that the orbit of the comet of 1866 is identical with that of the August swarm of meteors known as the Perseids, and connections between comets and meteor streams have been found in at least three other cases. The fact is generally believed that comets are nothing but a condensation of meteorites rendered incandescent by the heat generated by their mutual collision when brought into close proximity.

6. Their composition, as inferred from that of the larger meteors which reach the earth, is identical or nearly so with that of matter brought up from great depths by volcanic eruptions. In each case they consist of two classes : one, composed mainly of native iron alloyed with nickel, the other of stony matter consisting mainly of compounds of silicon and magnesium. Most meteorites consist of compounds of the two classes, in which the stony parts seem to have broken into fragments by violent collision, and become embedded in iron which has been fused by heat into a plastic or pasty condition.

At this point our positive knowledge of meteorites from direct observation ceases, and we have to be guided by the spectroscope in further researches. This marvellous instrument enables us, by analyzing the light transmitted to us by all luminous objects however composed and however distant, to ascertain their composition as accurately as if portions of them had been brought down to earth and could be analyzed in our laboratories. We can tell whether they are gaseous, liquid, or solid ; whether they shine by intrinsic or reflected light ; and by comparing the lines in their spectra with those of known terrestrial elements, whether they contain those elements, or are made up of matter in a state unknown to us.

The first result of spectroscopic discoveries was to establish the fact that the sun, stars, nebulae, comets, and meteorites, all show such an identity in their spectra with some one or more of those terrestrial elements, as to leave no doubt that the composition of matter is uniform throughout the universe.

Further experiments, of which Mr. Norman Lockyer's paper, read to the Royal Society, affords the latest and most complete summary, carry this knowledge farther. They show that spectra are not fixed and invariable, but change according to the conditions of heat, pressure and otherwise, affecting the bodies from which the spectra are given out. Thus the spectrum of a comet in perihelion, when its component parts are crowded together and intensely heated by the sun, is very different from that of the same comet when it is at a great distance from the sun, either in advancing towards it or receding from it. Thus the spectrum of the great comet of 1882 when nearest the sun exhibited many of the lines obtained in the laboratory from the vapors of sodium, iron, and magnesium at the temperature of the Bunsen burner. As it receded the lines gradually died out until a very few were left; and in the comet of 1886-7, when last seen, all had died out except one line of magnesium. Thus carbon also, which is such an important ingredient in organic life, appears and disappears in cometary spectra according to the conditions of pressure and temperature.

What Mr. Lockyer has done is to show that all the varied spectra and classes of spectra, given out by suns, stars, nebulae, comets and shooting stars, can be reproduced from actual meteorites which have fallen to the earth, by experiments in the laboratory, with the exception only of those of stars which, like Sirius, are glowing at a transcendental temperature far exceeding that of our sun, and which cannot be approached by the electric arc in any form of intense heat which can be obtained in our present earth. Thus the "spectrum of the sun can be very fairly reproduced (in some parts almost line for line) by taking a composite photograph of the arc spectrum of several stony meteorites between iron meteoric poles."

We are now in a position to understand the meteorite theory of the universe. Granted that the number of meteorites in space is practically infinite, and that they tend to coalesce into streams, their collisions supply an equally unlimited fund of heat upon which we can draw at pleasure. The amount of heat developed by each collision is the transformed energy of the mechanical force. This force, and consequently this heat, increases with the square of the velocity. Thus, if a tropical hurricane, moving at the rate of 100 miles an hour, uproots trees and levels houses, the same mass of air moving with the mean meteoric velocity of 33 1-2 miles per second, would exert a force of one hundred and forty-four million times greater. We know from the explosion of dynamite that when a gas expands very much quicker than the air can get out of its way, the effect is as if the blow of a tremendous steam-hammer were inflicted on an

unyielding anvil ; and we can readily conceive, therefore, how meteorites are almost invariably burnt up and dissipated, even in the rare air of the upper atmosphere, and how their repeated collisions in space might generate any required amount of heat.

Suppose, therefore, in the beginning of things, space filled by an innumerable multitude of these little stony masses, composed of the one, or possibly two or three, primitive elements of matter, moving in all directions, with immense though different velocities, coalescing into streams and colliding, we have a basis out of which suns, stars, planets, satellites, nebulae and comets might be formed. The looser aggregations, giving fewer collisions and less heat, form comets and nebulae, and the clash of two mighty streams gives us suns like Sirius in a state of intense luminosity and temperature. As these cool and contract by radiating out their heat, they pass into the second stage of stars of which our sun is one, still glowing with heat and light, but cooled down to a point at which the primitive elements can combine and form secondary ones, which can be detected by the spectroscope, and identified with those with which we are familiar as chemical elements upon earth. As cooling proceeds, they pass from the white-hot into the red-hot stage, and finally into the cold and lifeless non-luminous stage of burnt-out suns. Not, however, necessarily to die, for in the chances of infinite time these dead and invisible masses may collide together, and at a blow regain their youth, and commence the cycle anew as suns of the first order.

There is grandeur in the idea which, to a certain extent, reproduces what the kinetic theory of gases teaches as to the clash of innumerable atoms darting about in all directions, producing the temperature and pressure of a gas in a confined space. Only here, instead of atoms—so small that one of them is of the size of a rifle bullet, compared with the earth—we have stony masses for atoms, stars and nebulae for molecules, and instead of glass jars or bladders, the whole universe.

This, however, is only the first stage of the theory. What are these little stony bodies, and how did they come there ? The only answer we can give is derived from the constitution of those larger meteor-stones which actually fall on the earth and can be examined. They have invariably the appearance of fragments torn from larger bodies by collisions or explosions, and there is no reason for doubting that what they appear to be they are.

This carries us back to the impact theory of which a full account is given in the work recently published by Dr. Croll on Stellar Evolution. It supposes that for an almost infinite time, an almost indefinite number of dark stars, or cold and non-luminous solid bodies of stellar magnitude, have been rushing about in an unlimited space in all directions, and with enormous velocities. Occasionally they collide, and, as mechanical principles show, generate an intense heat, more than sufficient to convert their whole mass into glowing gas, at a temperature which may possibly

dissociate its atoms, with the exception of some fragments from the shattered surfaces which are thrown off into space by the sudden generation of explosive gas. That they really are such dark suns rushing through space appears certain from what we know respecting the constitution of the visible stars. We find them exhibiting all ranges of temperature, from the intense heat of the white stars like Sirius, to that of the duller red stars like Arcturus, our own sun occupying an intermediate position; while our moon affords an example of a dead world, which from its smaller size has cooled more rapidly. As the moon is, so must the red stars inevitably become in a sufficient number of millions of years, if the laws of nature continue uninterrupted. And their proper motions, rushing through space in different directions with velocities ranging up to 400 miles per second, must continue after they have become dark, as long as the first law of motion holds good, that bodies in motion cannot generate changes of motion of themselves, but must continue to move forwards in a straight line unless acted upon by some external force.

Among bodies thus rushing in different directions collisions must occasionally occur, and it is a matter of simple calculation that the mechanical force converted into heat by such collisions, is amply sufficient to produce any temperature that may be required to create new suns and nebulae, and to account for all the phenomena which are actually observed.

Moreover, the existence of such dark bodies is established by direct observation. That fragmentary masses, weighing several cwts, come in from space and fall upon the earth is a *fact*. So also is it a *fact* that bright stars, some of them like the famous new star in Cassiopæa, brighter than stars of the first magnitude, suddenly blaze out and gradually disappear. The impact theory accounts for this, while the nebular theory, or any hypothesis based solely on the contraction of a mass of nebulous vapor under the law of gravity, entirely fails to do so. Again, the phenomena of variable stars can best be explained by assuming either that such stars pass periodically through dense streams of meteoric matter, increasing their light, or else that large dark bodies are periodically interposed between us and the stars, and thus diminish it. The constitution also of comets, and of many nebulae, as disclosed by the spectroscope, is far better explained by the impact than by the nebular theory. In fact, it is inconsistent with the latter theory, which can give no account of comets, meteorites, or other phenomena, which imply small dissociated portions of matter, moving in streams or aggregating in nebulae, and rushing with immense velocities in paths inclined to each other at different angles, and which have no relation to the rotating plane of the solar or any other system. Even within the limits of the planetary system there are many facts which are better explained by the theory of impact than by that of contraction. For instance the great difference in the inclination of the axes of rotation of many planets and satellites to the plane in which they revolve about the sun and their primaries. But after all there

is no real inconsistency between the impact theory and that of Laplace. The former takes up the history of the universe at an earlier stage, and supplies a mass of gas or cosmic matter, at a higher temperature, and with that temperature longer maintained by repeated collisions and indraught of meteorites, than is assigned to it by the nebular hypothesis, but ultimately a great deal of this gas must resolve itself into such a medium as Laplace supposes, contracting and forming whirls under the operation of gravity. The triumphs of mathematical science deduced from Newton's law of gravity were so signal, that it is not surprising that it should have been assumed that gravity, and gravity alone, was the fundamental law which would explain everything. But, as often happens, increasing knowledge has rendered many things uncertain which appeared to be certain. Problems which seemed simple have become complex, and it has become apparent that the universe contains many forms of motion, and many manifestations of energy, which cannot be explained by the laws of gravity. For instance, the runaway stars, the world of meteorites, the proper motions of molecules and atoms, and the requisite duration of solar heat to account for the undoubted facts of geology. The law of gravity and the nebular theory were a great step towards reducing the phenomena of the universe to one great uniform law; but the theory of impact takes up the history at an earlier stage, and carries us one step further towards infinity and eternity. If the whole stellar universe is not, so to speak, the crop of a single season, but an indefinite succession of crops, stars being born and dying, dying and being renewed, without appearance of a beginning or an end, the vista of existence is vastly enlarged. But even this is not the last step towards the unknowable. Granted that these dark suns are facts, they are not ultimate facts. They are matter, and matter is made up of molecules, and molecules of atoms. Judging from the fragments which reach the earth, and the teachings of the spectroscope, meteoric matter is composed of a few atoms identical with those which are the most common elements of terrestrial chemistry. Hydrogen, nitrogen, sulphur, iron, nickel, calcium, silicon, and aluminium, are the principal, if not the sole constituents of meteoric stones, and are those the lines of one or more of which appear in the spectra of stars, nebulae, meteors, and comets, according to their conditions of temperature and pressure. What then are these atoms? There are some seventy of them known to chemists as ultimate elements; that is to say, which are not further resolvable by any means available in our laboratories. But no one can suppose that this is really the ultimate fact, and that original matter really consists of seventy indivisible units, ranging in weight from the 1 of hydrogen to the 240 of uranium, and more than half of them consisting of exceedingly rare elements, which play no appreciable part in the construction of any form of matter. The mind refuses to accept the conclusion that such little mole-hills as yttrium, zirconium and gallium, only known as minute products of a few of the rarest minerals,

really present unsurmountable obstacles to the science which has scaled Alps, measured light-waves, and weighted stars.

Accordingly, constant attempts are being made to reduce atoms to one simple element, and to one comprehensive law. The problem is not yet solved ; but it is being attacked on various sides, and almost every day brings us nearer towards a solution. Hydrogen first put in a claim to be the primitive element, as being the lightest, and it is remarkable that the weight of a very large proportion of the other elementary atoms is an exact multiple of that of the hydrogen atom. The spectral lines of hydrogen are also the last seen in those of the hottest stars, where all secondary combinations may be supposed to be dissociated. This hydrogen theory, which was first proposed by Prout, can hardly be said to be firmly established, as there are some important elements, such as chlorine and sodium, which do not correspond with the law of being simple multiples of hydrogen. Still the agreement is too close in a number of cases to be accidental, and the latest researches show that by halving the hydrogen atom, that is, supposing this atom to be composed of two-linked atoms, the deviations from the law may be reduced within limits which may be fairly attributable to errors in the delicate operations requisite for fixing atomic weights. Mr. Crookes suggests that helium, which is only known from a single line in the solar spectrum, and which is apparently lighter than hydrogen, may be this half-hydrogen-atom, and thus be the ultimate element out of which all other atoms are manufactured. For Herschell and Clark Maxwell both arrived at the conclusion that "atoms bear the impress of being manufactured articles."

It is, in fact, certain that some relation exists among them, for the Russian chemist Mendeleeff has shown that if the atomic weights of the known elements are arranged in a consecutive order, they show what is called a periodical law. That is, the other qualities of atoms, such as specific heat, affinity, atomicity, etc., rise with the weights up to a certain point, then fall, then rise again, and so describe a sort of zig-zag line like those we see of the readings of the barometer on a weather chart. Only this atomic zig-zag seems to follow a certain law, so that groups of elements which have similar qualities recur at nearly fixed intervals.

The meaning of this law is not yet clear, but it is so certain that it enabled Mendeleeff to predict the discovery of three new elements which have since been found, filling up gaps in the series which his law required.

The nearest approach to a mathematical explanation of this law is afforded by the discovery that if the cube roots of the atomic weights were used as ordinates instead of the weights themselves, which is equivalent to taking volumes instead of lines to represent the atomic weights, the zig-zag line resolves itself into a regular curve, which is

identical with, or very closely resembles, the logarithmic curve well known to mathematicians.

What the effect of these laws may be is not yet fully known, but they all point towards the conclusion that the atoms which we call elementary are all really manufactured out of some one atom or sub-atom, which is the primary element of matter. Where are they manufactured? Crookes says on the outside of the universe, wherever that may be, and that they are destroyed or dissociated when they reach the position of the lowest potential energy, which is in the centres of the largest stars. This may or may not be true, but it shows the direction in which speculation is tending, and carries our conceptions of the possibilities of the universe far beyond the limits of the nebular hypothesis and the results of the law of gravity.

This also may be said of the atoms, whatever sort of manufactured articles they may be, they are manufactured to the same pattern, like the nuts and screws of a large locomotive or gun factory. The hydrogen-atom gives the same spectral lines, which means that it vibrates, and starts or absorbs ether-waves precisely in the same manner, whether it exists in Sirius, in the nebula of Orion, or in a jar of gas in a laboratory.

The problem of atoms is being attacked from another side. What, after all, are atoms, or the primary protyle or sub-atom, if we can succeed in tracing them back to one origin? The general idea is that of an almost infinitesimally small, but still finite, unit of matter, impenetrable, indivisible, and endowed with enormous energies, both of velocity and attractive and repulsive forces. Various other ideas have been started. Some have considered them as mere centres of force without parts or magnitude; others as condensed portions of a continuous matter; but all these theories are open to fatal objections, and the conception of atoms has pretty well settled down to that of small separate bodies floating like buoys, in an ocean of ether, that is, of the still rarer, all-prevailing medium which transmits light and heat. This accounts best for all the phenomena hitherto observed, and may be said to hold the field. The only serious competitor with it is the vortex theory of Helmholtz and Thomson, which assumes atoms to be revolving rings of a perfect fluid pervading space. The general idea is given by the rings of smoke which occasionally escape from the lips of smokers. These rings persist for a long time, glide before the knife so as to be indivisible, and when two of them collide they rebound and vibrate. In a word, they behave in many respects very like atoms, and refined mathematical calculations show that if we could suppose them formed and rotating, not in air, but in what is called a perfect fluid, incompressible, possessing inertia, and yet offering no resistance whatever to motion through it in any direction, such vortex-rings would be indeed indivisible and indestructible, and might well be what we call atoms. The theory is extremely ingenious, but it has hardly yet got be-

yond the stage of a mathematical speculation, like space of four dimensions, which has no relation to actual facts known by observation and experiment.

To begin with, there is absolutely no proof of such a medium as is required. It is already difficult enough to realize the conception of such a medium as ether, though its waves can be measured, and its existence is imperatively demanded by the phenomena of light and heat. But to suppose a second and equally all-pervading medium, of a different nature, and with properties still more inconceivable, is too much for the imagination, and would require to be supported by undoubted facts. Again, atoms have weight, and the supposed medium has no weight and offers no resistance. Why should a portion of it acquire weight by being made to rotate; and what conceivable cause could set it rotating? But the most fatal objection is, how could such rings continue to rotate unless some external or centripetal force counteracted the centrifugal tendency to fly off from the circumference in a straight line? Rotation implies centrifugal force, and matter which possesses inertia and obeys the first law of motion must inevitably fly off, unless acted on by some other force. In the case of the earth, the sun's attraction supplies the centripetal force; in the case of a wheel or bicycle the molecular cohesion of the solid parts; in the case of smoke-rings the resistance of the air. But what supplies it in the vortex-rings, rotating in a perfect fluid, which offers no resistance to any motion?

It will be seen that the problem of atoms, involving that of the ultimate constitution of matter, is fast advancing towards some definite solution; but it is not yet solved, and is a problem of the future. Seeing, however, the wonderful advances which have been made in the last half-century, and specially in the last few years, it is impossible to doubt that, as in the case of gravity, some future Newton will sum up in some comprehensive law all the scattered facts which point in the same direction towards the unity of the universe, and the persistence of evolution from the simplest to the most complex.

But even when this triumph of science has been attained, the question remains as insoluble as ever—Whence came this primeval matter and primeval energy?

I recollect as a boy looking up at the stars, and asking myself what does all this mean? Where did it come from, and what is beyond it? The only answer was a sort of painful ache, as of straining the eyes to see in the darkness. And now that, thanks to the discoveries of modern science, I can see so much beyond the visible stars, far off into the infinitely great, far down into the infinitely small, far back into infinite Time—at the end of all I am not one whit advanced beyond that feeling of boyhood. I gaze with straining eyes into the Unknowable, and gaze in vain. Others may see, or fancy they see, something behind the knowable phenomena of the universe, linked together by invariable laws. Some a

personal God, others a design like human design, a living whole, ideas in a Universal Mind, illusion, Maya Nirvana, what not. For my own part, if I candidly confess the truth to myself, I can only say with Tennyson—

“Behold ! I know not anything,”

and content myself with the only creed which seems to me certain, that of trying to do some little good in my generation, and leave the world a little better rather than a little worse ~~for~~ *for* my individual unit of existence.

CHAPTER III.

CLIMATE.

GEOLGY and astronomy are in conflict on other questions as well as that of the time during which a sufficient supply of solar heat has rendered the earth habitable. The conditions of that supply are as important as the total quantity, and these conditions depend mainly on climate. Geology seems to show that during the vast lapse of time embraced by fossil records from the Cambrian to the close of the Tertiary period, there were no well-marked zones of climate, and the conditions of life were uniform, or nearly so, throughout the whole earth. Astronomy, on the other hand, asserts that the vicissitudes of the seasons, with their corresponding zones of climate, must have existed from the beginning as they now are. Geology relies on undoubted facts. Coral formations, which require both a warm and an equable climate, and cannot live in a temperature below 66° Fahrenheit, were found by Captain Nares in Greenland, in latitude $81^{\circ} 40'$. Ammonites of the same genera and even of the same species are found alike in Melville's Island and in India; and Ichthyosauri have been met with in Greenland and Spitzbergen. Lyell, Dana, and all modern geologists agree that in primordial times there were "no zones of climate," "no marked difference between life in warm and cold latitudes;" "warm Arctic seas all the year round."

This continued until what is, geologically speaking, quite the other day, the close of the Tertiary period. In Spitzbergen, latitude $78^{\circ} 56'$, are found the remains of a luxuriant Miocene flora, comprising species like the common cypress, which now grow in the Southern United States and California. Magnolias and zamias are found in Miocene strata in Greenland in latitude 70° .

These species, it must be observed, require not only a warm but an equable climate. They would be killed by a single severe night's frost, and yet they grew and flourished where the winter night now lasts for four months, and where the thermometer has registered more than 100° below freezing-point. The difference between summer and winter temperature in high Arctic latitudes exceeds 100° Fahrenheit, and whatever may have been the initial temperature, this difference of heat, due to solar radiation, must have been added and subtracted every year, as long as the earth's axis of rotation preserved its present obliquity to the plane of the ecliptic

in which the earth revolves round the sun. If the temperature of Spitzbergen was from any cause high enough to prevent the thermometer from falling below zero in winter, it must have risen in summer far above the extremest tropical temperature at which life and vegetation are possible.

Nor is it a question of temperature only, but of light and the actinic rays of the solar beam, which are equally essential for vegetation. A luxuriant forest vegetation, including such forms as the magnolia and cypress, could no more flourish under any conditions now known to us in Spitzbergen, than they could if shut up for four months in a dark cellar. And yet with the present obliquity of the axis, the sun must have been below the horizon in those latitudes from November till March.

At present, as we go north from the equator towards the Arctic circle, we find species changing to accommodate themselves to the change of environment. Palms are succeeded by oaks and beeches; these again by pines and birches, and these by dwarf willows and lichens, until all vegetation, except of the very humblest forms, dies out as we approach the pole. But in the geological records of earlier periods no such changes are discernible. The Miocene magnolia of Spitzbergen is not even a greatly modified magnolia, but of the same species as the magnolia of the present day. The Miocene cypress is the common cypress. If there were no such science as astronomy, geology would point to the conclusion that until after the Miocene period climate was uniform; there were no distinct zones or seasons, and therefore no obliquity of the earth's axis, or at any rate nothing like the present amount. With these conditions there would have been perpetual spring, and all we should require would be a higher average temperature for the whole earth. But to this conclusion astronomy opposes an inflexible *non possumus*. If there is one thing more certain than another, it is that mathematical calculations, based on Newton's law of gravity, explain all the movements of the solar system. They do so with a certainty that enables us to predict the places of the earth, moon, and planets years before-hand, with absolute accuracy. And if there is one thing more certain than another in these calculations, it is that no permanent change is possible in the inclination of the earth's axis. The earth now spins, in twenty-four hours, round an axis inclined at an angle of $66\frac{1}{2}^{\circ}$ to the plane on which it revolves round the sun in a year. It must always have so spun, for there is no cause known to science by which, when this rotation was once established, the inclination of the axis could have been permanently altered. The plane of the equator shifts its position slowly on that of the ecliptic, owing to various minor actions of the force of gravity, the principal one being the precession of the equinoxes, due to the protuberant matter at the earth's equator; and thus in 22,000 years, it makes a complete circuit, returning to its original position. But during this circuit, its inclination to the plane of the ecliptic remains practically constant, and the effect on the seasons is unchanged, except that they come at different positions of the earth in its

orbit round the sun, so that summer and winter alternately come when we are farthest from the sun or nearest to it. At present we are nearer the sun in winter than in summer, and the winter half of the year is shorter than the summer half in the Northern hemisphere. In 11,000 years this position will be reversed, and winter will be shorter than summer in the Southern hemisphere; but there is nothing in these slight changes to affect the general course of the seasons, and as we happen to be now nearer the sun in winter, the effect of any slight change due to precession would rather be to increase the difference between summer and winter heat in high northern latitudes, and so aggravate the difficulty of reconciling the conclusions of the two conflicting sciences. And yet there must be some way of reconciling them. Truth cannot speak with two voices, and the laws of nature cannot give contradictory results.

Let us consider first what the undoubted facts of geology require us to assume. Two things—firstly, that the general temperature of the earth was higher in former times than now; secondly, that it was more uniform. As regards the first condition, astronomy interposes no obstacle but affords no aid, and it must be admitted that we are still in the region of conjecture rather than of certainty. The first obvious guess is that the earth was formerly hotter, and has been gradually cooling. But this guess is contradicted by mathematical calculations as to the cooling of heated bodies, which show that after the earth had cooled down to the point of forming a solid crust, many miles in thickness, of non-conducting rock, internal heat could have had little or no effect on surface temperature. This is confirmed by what we know of the climates of areas where large reservoirs of internal heat lie comparatively near the surface, as in Iceland and other volcanic districts. In the celebrated Comstock lode the heat of the earth increases so rapidly, that it becomes impossible to work the mines below a very moderate depth. Yet in all these cases the temperature at the surface remains the same as that of other regions on the same isotherm, and is determined by the same circumstances of latitude, elevation, aerial and ocean currents, and other known conditions. Nor if the internal temperature of the earth was a factor in the problem, would it be easy to account for our recovery from the cold of the Glacial period, in the face of a continued and progressive diminution of the planet's heat.

Another conjecture is that the sun may have given out more heat formerly. This, however, is a mere guess, confirmed by no theory or experience. On the contrary, theory rather points to the paradoxical conclusion that, as the sun has cooled, it has got hotter; that is, that a volume of gas, in cooling, develops rather more heat by contracting than it loses by radiating. Moreover, as we have already seen, the difficulty is to understand how even the present supply of solar heat can have been maintained long enough for the time requisite to account for the facts of geology; and the improvement in climate since the Glacial period is as inconsistent with solar as it is with terrestrial refrigeration.

The passage of the solar system through warmer and colder regions of space is another explanation which has been invoked. But this—though by no means improbable—is as yet a mere possibility, and based on nothing approaching to actual knowledge.

Of existing known causes there is one which seems, as far as it goes, to be a *vera causa* which might have given the earth's surface a warmer temperature in early ages. Its reality may be proved by the very simple experiment of sleeping on a cold night without a blanket. Evidently, other circumstances being the same, such as the reading of the thermometer and blood heat of the body, the question of blanket or no blanket makes an immense difference in the resulting temperature. Why is this the case? Because the blanket keeps the heat in, or in other words radiates it back to the body instead of letting it radiate out into space. There are other things which do this even more effectually than a wollen blanket, for they let the heat of the sun's rays in, and having let it in, catch it as in a trap, and do not let it out again. Glass, for instance, in a conservatory, is such a trap, and, as we all know, will keep the temperature inside much warmer than it is outside, even without the aid of artificial heat. Many other substances have the same property, and among them two which are essential elements of the earth's atmosphere, water in the form of vapor, and carbonic dioxide. Tyndall, in his *Heat considered as a Mode of Motion*, has shown clearly what an immense part these gases have in maintaining the temperature of the earth's surface. If the cold is more intense, especially at night, on high mountains, it is not because less heat is received from the sun's rays during the twenty-four hours, but because half the atmosphere is left below, and so the heat-retaining blanket is thin and threadbare. So in deserts where the air is dry and there is little aqueous vapor, the heat by day may be excessive and yet the cold by night well-nigh intolerable. "The removal," says Tyndall, "for a single summer's night of the aqueous vapor which covers England would be attended by the destruction of every plant which a freezing temperature could kill." And such a removal on a winter's night would send the thermometer down far below zero.

This property of retaining heat is not confined to water in the form of vapor; it is common to other gases, and often in a higher degree. Among these is one which is always present in the atmosphere—carbonic-dioxide, a gas formed by the combination of two atoms of oxygen with one of carbon.

The percentage of this gas in the air is very small, only a fraction of one per cent., and yet it constitutes the sole source of supply of the carbon required, directly for vegetable, and indirectly for animal life. At present the balance between the two sorts of life seems to be kept up, as in an aquarium, by animals restoring to the air, in the form of carbonic-dioxide, the carbon which has been abstracted from it by plants. But when we look at the enormous amount of carbon which has been

locked up in coal, limestone, and other carboniferous formations of the earth's crust, it is evident that it must be vastly greater than could be derived from such a small percentage of carbonic-dioxide as now exists in the atmosphere. It has been estimated by experienced geologists as many hundred times greater. Where all this carbon could have come from is a question not yet solved. Some have thought that it may have been supplied from the interior of the earth by volcanoes ; but although it is certain that some volcanic vents do emit carbonic-dioxide, as in the case of Lake Avernus, and the Grotto-del-cane, near Naples, the quantity is small, and the better opinion seems to be that it is only given out when subterranean fires come in contact with limestone, or some other form of previously deposited carbon. Did the carbon, then, come from the air ? If so, there must have been more than one hundred times as much carbonic-dioxide in it in early geological times as there is at present.

This would go some way towards explaining the difficulty of the higher temperature prevailing in past ages, for more carbonic-dioxide would undoubtedly be equivalent to an additional blanket to protect the earth from cold ; and the higher temperature thus caused would enable the air to hold more aqueous vapor in solution, and thus increase the thickness of the water-blanket.

It is conceivable that under such conditions a warm and humid climate may have prevailed over a great part of the earth's surface, though this would hardly meet the difficulty of the uniform existence of such a climate in latitudes where the supply of heat from the sun must have been so very different in winter and summer. Nor would this difficulty be removed even if we were to suppose that the earth's axis might have been nearly vertical to the plane of the ecliptic. This might meet the difficulty as to light and actinic rays, for there would be everywhere twelve hours of day throughout the year ; but it would not meet the difficulty as to temperature, for if the air-blanket was sufficient to retain heat enough in the Arctic Circle to prevent frosts, from a sun which never rose much above the horizon, it must have retained far too much heat for existing life and vegetation in latitudes nearer to the equator.

There are, however, many grave objections to considering this to be the sole or even the principal cause of the warmer climates of early ages. It is by no means certain that either animal or vegetable life, in anything like known forms, could exist in an atmosphere so surcharged with carbon. Nor is carbon all ; we must account also for oxygen. If the whole of the carbon now fixed in the different strata of the earth's crust was derived from carbonic-dioxide originally present in the atmosphere, so also must have been the oxygen, which in various forms of oxides now forms an even larger constituent of that crust. Oxygen is a very active element, which, under moderate conditions of heat and moisture, combines readily with iron, silicon, calcium, aluminium, and all the metallic bases. Many hundred times more oxygen must have been withdrawn

from the air than now exists in it to form the rocks which are the principal part of the earth's crust. But an excess of oxygen is as fatal to life as an excess of carbonic-dioxide. Terrestrial life, as known to us, depends on a very delicate adjustment of the quantities of oxygen and nitrogen in the air. A very little excess or deficit of either would destroy all air-breathing animals. With too much oxygen we should be burnt up even more rapidly than the drunkard is by too much alcohol ; with too little, the fire of life would be choked by ashes and refuse. If there was formerly a hundred, or even ten times more oxygen in the atmosphere than there is now, there must have been a corresponding excess of nitrogen to neutralize it, and if so, what has become of the nitrogen ? Nitrogen is an inert element which enters sparingly into combinations, and does not, like oxygen and carbon, get locked up in great masses of the earth's solid crust. Once in the atmosphere it would seem that it must have remained there ; and if so, as oxygen was withdrawn in continually increasing quantities, how could the life-sustaining proportion of the two gases have been maintained and continued down to the present day ?

It has been said that life may have been so differently organized in past geological ages as to have existed under very different conditions, and the mammoth is appealed to as an instance of an elephant modified so as to resist Arctic cold, and the result of deep-sea dredgings shows that molluscs, crustaceans, and other low forms of life may exist in ice-cold water and without light. But we can hardly suppose such profound modifications of existing genera and species of highly-organized plants and animals as would enable them to breathe air of a very different composition.

For we must remember that the evidence for an elevated and uniform temperature is not confined to remote geological ages, but come down to the close of the Tertiary period, when existing forms, both of animal and vegetable life, were firmly established, and several species have survived to the present day without perceptible change. Thus when the magnolia was growing in Spitzbergen, the dryopithecus was living in Southern France. Can it be supposed that this anthropoid ape breathed a different air from his congeners, the chimpanzee and gorilla ; and yet if his lungs required the same air, how could excess of carbonic-dioxide have supplied the extra warm blanket to protect the Spitzbergen magnolia ?

A different configuration of sea and land is the explanation which many geologists, following Lyell, have advanced for different conditions of climate. And no doubt aerial and oceanic currents, such as now cause the trade-winds and Gulf Stream, are responsible for great variations of climate, while low lands in low, and high lands in high latitudes must always have had a considerable influence in raising or depressing temperature. But changes of this description can more readily account for the cold of the Glacial, than for the heat of the Tertiary and preceding periods. We have now got the trade-winds and the Gulf

Stream in the North Atlantic, and although the diversion of the latter might bring the ice-cap back to London and New York, and make the climate of Scandinavia and Scotland the same as that of Greenland and Labrador, its presence takes us a very short way towards enabling magnolias to flourish in Spitzbergen.

In like manner, even if Croll's theory were established, which it is far from being, and the effect of the obliquity of the earth's axis combined with precession, though imperceptible while the earth's orbit was nearly circular, became great in the two hemispheres alternately, when the orbit was approaching its maximum eccentricity, this would not explain the high and uniform temperature of past geological ages. If this theory were true, what we should look for would be two or three Glacial periods in the course of each geological epoch; for the least time required for any of the great geological formations must have been long enough to include two or three secular variations of the earth's orbit, from minimum to maximum eccentricity. And each of these Glacial periods must have included several changes, alternating, at intervals of 11,000 years, between severe cold and genial heat, owing to the effect of the precession of the equinoxes combined with great eccentricity.

Instead of uniform warmth, there must have been more than 100 Glacial periods during the immense lapse of time between the dawn of life in the Cambrian, and the last of such periods in the Quaternary. It is a moot point with geologists whether traces of a single one of such periods, prior to the last one, have been found. There are a few conglomerates which look very like consolidated boulder-clays, and every now and then we hear of some formation, supposed to be glaciated, being found in the Permian and in other formations in India, South Africa, and Australia; but there is no evidence hitherto which commands the general assent of geologists, for a single Glacial period prior to the recent one which closed the Tertiary period. And there is abundant evidence that during many formations, such as the Carboniferous and Coal-measures, which must have taken millions of years to accumulate, there were no vicissitudes of climate such as must have inevitably occurred if any astronomical cause, such as precession or eccentricity, had been sufficient to bring about great vicissitudes of heat and cold. And what is still more conclusive, the evolution of vegetable and animal life, as shown by fossils, affords no trace of the repeated modifications which must have taken place within the limits of the same geological formation, if there had been such vicissitudes of heat and cold as the theory requires.

It remains to be considered whether any change in the direction of the earth's axis may have been possible. Clearly no such change can have taken place within the earth itself, for its shape is that of an oblate spheroid, revolving round its present axis. Any displacement of the poles must displace the present equator, and tend to establish a new one on a different plane. But the equatorial diameter of the earth is 26 miles

longer than the polar diameter, so that any displacement of the poles must have tended to displace this enormous mass of protuberant matter, and send such portion of it as was fluid in a diluvian wave, miles in height, towards the new position of equilibrium; while the solid portion remained in a plane no longer coincident with that of the earth's rotation. There is no trace of anything of the sort having ever occurred, and if the axis has shifted, the whole earth has shifted with it, which is just what astronomers declare to be impossible by any known laws.

But are the whole of the laws really known? There is nothing more difficult than to account for the varying inclinations of the axes of rotation of the different bodies of the solar system. On the nebular hypothesis, which traces the sun, planets, and satellites back to the condensation of a revolving mass of nebulous matter, one might have expected to find the planes of rotation and revolution of planets and satellites, not only in the same general direction from west to east, but nearly coincident. Jupiter, however, is the only one of the planets which fulfills this condition. Its axis of rotation is inclined at an angle of 87° , or very nearly at right angles, to the plane of its revolution round the sun. But there is no certain rule. That of Saturn, which comes next in order on the outside of Jupiter, has an inclination of 64° while that of the next planet on the inside, Mars, is $61^\circ 18'$. The earth's axis is inclined at $66^\circ 33'$, while we find its satellite, the moon, rotating like Jupiter in a plane inclined only $1^\circ 30'$, and the axis of Venus, on the other hand, is so oblique, that in its winter the Arctic Circle almost extends to the equator.

The case of the moon is most difficult to understand, for on any theory of its origin, whether as a condensed ring left behind as the nebulous matter of the earth contracted, or whether it was ejected from the earth in some eruption of its fiery stages, it might have been expected to retain nearly the same rotatory motion as its parent orb. But if so, clearly some unknown force must have intervened, either to make the earth's axis more, or that of the moon less oblique, than they were originally. No such force is known, nor has any plausible guess been made as to what might have occasioned it; but the same observation applies to many of the phenomena of the solar system. How has the supply of solar heat been kept up for the time required by geology? How does the energy we call gravitation act across space from atom to atom, and from star to star, and how is its supply maintained? Why is the axis of the earth inclined at an angle of $66^\circ 30'$ to the ecliptic, while that of Jupiter is almost perpendicular to it, and that of Venus oblique to the extent of nearly two-thirds of a right angle?

These are all problems which depend on natural laws, and must lie within the limits of human reason; but they are pebbles which have not yet been picked up on the shore of the ocean of truth. It may bring home to us the force of Newton's saying that we are but as children pick-

ing up such pebbles when we see what a multitude of the deepest problems, as to the constitution of the earth and of the universe, are raised by the simple fact that Captain Nares brought back a specimen of coral from latitude $81^{\circ} 40'$ in Greenland, and that luxuriant forests, of a sub-tropical or warm temperate vegetation, flourished in Spitzbergen as lately as the period when an anthropoid ape of the stature of man was living in the south of France, and when man himself or his savage progenitors, were possibly or even probably already chipping flints into rude implements.

CHAPTER IV.

THE GLACIAL PERIOD.

THE date and duration of the Glacial period present a problem which is in many respects of the highest interest. It comes nearest to us as inaugurating the recent period in which we live, and for which we have historical data. It affords the best chance of obtaining an approximate standard by which to measure geological time in years or centuries. And it touches directly on the great question of the Origin of Man.

For man is like the mammoth and cave bear, an essential part of the Quaternary fauna, and whatever doubts may be entertained as to his existence in Tertiary times, there can be none as to the fact that his remains are found in great numbers, and widely scattered over the four quarters of the globe, in conjunction with those of the mammoth and other characteristic Quaternary mammals, in deposits which date, probably from the earlier, and certainly from the intermediate and later stages of the Glacial period. A short date, therefore, for that period shortens that for which we have positive proof of the existence of man, and a very short date reduces it to a length during which it is simply impossible that such a state of things as is found existing in Egypt 7000 years ago could have grown up by natural laws and evolution, and therefore brings us back to the old theories of repeated and recent acts of supernatural interference, which, since the works of Lyell and of Darwin, have been generally considered to be completely exploded.

The question, therefore, is one of the highest theological as well as scientific importance, and as such it has too often been approached with theological prepossessions. An extreme instance of this is afforded by Sir J. Dawson, who in his work on *Fossil Man* assigns 7000 years as the probable date for the first appearance of man upon earth, ignoring the fact that at this date a dense and civilized population already existed in Egypt, with a highly-developed language and system of writing and religion; and that the types of the various races of mankind, such as the Negro, the Copt, the Semitic, and the Arian, are as clearly distinguished in the paintings in Egyptian tombs, 5000 years ago, as they are at the present day.

Sir J. Dawson, however, though an excellent geologist as long as the older formations are concerned, is so dominated by the desire to square

facts with the account of creation in Genesis, that he becomes totally unreliable when the human era is approaching.

Quite recently, a very different authority, Professor Prestwich, reasoning on strictly scientific grounds, concludes, "that the Glacial period, or epoch of extreme cold, may not have lasted longer than from 15,000 to 25,000 years, and the Post-Glacial period of the melting away of the ice-sheet to from 8000 to 10,000 years or less; giving to palæolithic man no greater antiquity than perhaps about 20,000 to 30,000 years, while should he be restricted to the so-called Post-Glacial period, his antiquity need not go farther back than from 10,000 to 15,000 years before the time of neolithic man."

Prestwich cannot be accused of theological bias, and in fact this estimate is as inconsistent with theological theories of Adam and Noah, as if the figures were multiplied tenfold. But he was influenced by the wish to make geological time accord with the short-date estimates of Sir W. Thomson, as to the possible duration of solar heat. Be this as it may, the fact that an authority like Prestwich reduces to 20,000 years a period to which Lyell and modern geologists generally have assigned a duration of more like 200,000 shows in what a state of uncertainty we are as to this vitally important problem. For even the longest period for man's antiquity assigned by Prestwich would be clearly insufficient to allow for the development of Egyptian civilization as it existed 7000 years ago, from savage and semi-animal ancestors, and still less for the evolution of the human race from earlier types, as is proved to have been the case with the horse, stag, elephant, ape, and other mammals, with whom man is so intimately connected, both in physical structure and in geological association.

It is highly important, therefore, to consider the grounds on which the various theories are based, of the probable cause and duration of the Glacial period. The first natural guess was to attribute it to the precession of the equinoxes. Owing to this cause the North Pole is alternately turned towards the sun every summer, and away from it every winter, the reverse being the case in the southern hemisphere. But owing to the eccentricity of the earth's orbit, the duration of the seasons is not exactly equal, and summer and winter may occur either when the earth is nearest to or farthest away from the sun. At present winter occurs in the Northern hemisphere when the earth is nearest the sun and moving with the greatest velocity, so that it is shorter by some days, and summer longer, than in the Southern hemisphere. Now it is a fact that what may be called a Glacial period prevails at present in the Southern hemisphere, while corresponding latitudes in the Northern hemisphere enjoy a temperate climate. It might be thought that this fact afforded an explanation of the Glacial period; but this conjecture is negatived when it is considered that this revolution of the earth's axis is periodical, and completed in about 22,000 years, so that if it were the sole or principal cause

of Glacial epochs, they must have recurred from the beginning of geological time at this short interval, which is altogether inconsistent with the evidence of facts.

Croll expanded this crude theory into one which had vastly more plausibility, viz., that although the effects of precession might be imperceptible while the earth's orbit was nearly circular as at present, they might become very powerful when they coincided with one of the long periods at which the earth's orbit became flattened out into an ellipse of *maximum* eccentricity. He showed by calculation that one such period began 24,000 years ago, attained its *maximum* in 80,000 years, and passed away about 80,000 years before the present era. These figures fitted in so well with those deduced by Lyell and other eminent geologists from geological data, that Croll's theory received very general acceptance. But it is open to the same objection, though in a less degree, that it requires us to assume a periodical succession of Glacial epochs. The oscillations of the eccentricity of the earth's orbit, about its *maximum* and *minimum* limits, though slow as measured by centuries, are not so slow according to the standards of geological time. Croll's calculations have shown that another position, such as is assumed to have caused the latest Glacial period, must have occurred 500,000 years earlier. The calculations have not been carried further back, but it is tolerably certain that, if Croll's theory be correct, at least two or three Glacial periods must have occurred during each of the great geological epochs. This is opposed to geological evidence. The Permian is the only formation in which what looks like traces of glacial action have been unmistakably found, and even these are considered doubtful by many geologists. Still more doubtful are the proofs of older Glacial epochs deduced from isolated cases of boulders, as in the Miocene conglomerate of Monte Superga, near Turin, the Flysch of Switzerland, and in some of the conglomerates of the old Devonian. "Not proven" is the verdict which most geologists would return on the few alleged instances of earlier Glacial periods; while if Croll's theory were true, we might expect to find them frequently. Above all, it is difficult to conceive how two or three great changes of temperature could have occurred during each geological formation without showing unmistakable traces in the fauna, and still more distinctly in the flora, of the epoch. Ferns must have died out and been succeeded by mosses; and these in their turn given place to ferns two or three times over or more, during the growth of the Coal-measures, if any changes of climate had occurred at all resembling those of the recent Glacial period.

The confidence, therefore, with which Croll's theory was at first received has been a good deal shaken, and although many geologists still believe that it may have been one among other causes of the last great refrigeration, it can no longer be considered as affording a reliable standard by which to measure the time in historical years, either of the Quaternary, or still less of any previous geological epoch.

We have to fall back, therefore, on the geological evidence of deposition and denudation, of the rise and fall of continents, of the erosion of rivers, valleys, and so forth, in any attempt to decide between the 200,000 years of Lyell, and the 20,000 years of Prestwich. The former period, based on the minute and careful investigations of Lyell, Geikie, Croll, and other eminent geologists, held the field until the recent attempts of Prestwich and others to reconcile geology with Sir W. Thomson's theory of solar heat, by reducing geological time to about one-tenth of the accepted amounts.

Prestwich, in his recently-published works on geology, states that he has been influenced mainly by two considerations.

1. The wish to bridge over the wide chasm between geologists and physicists as to the possible duration of the supply of solar heat.

2. The difficulty of conceiving that man could have existed for a period of 80,000 or 100,000 years without change and without progress.

And the principal, or rather the sole fact on which he relies is, that the advance of the glaciers of Greenland is found to be much more rapid than that of the Swiss glaciers upon which previous theories had been based of the time required for the advance of the Scandinavian and Laurentian ice-fields over Northern Europe and America,

The two considerations may be briefly discussed. The first, as I have already shown, is based on a theory as to solar heat which is in the highest degree uncertain, and which requires rather to be tested by the positive facts of geology than accepted as an admitted conclusion, to which those facts must be squared. To allow it to distort those facts, or even to influence us in interpreting them, is a prepossession only one degree less mischievous than the theological prepossession which so long retarded the progress of true science.

The second consideration, as to the rate of human progress, is a mere question of what each individual inquirer may think probable estimates, which will depend very much on his habit of mind and previous bias. There are positively no facts on which to base a conclusion as to the rate of progress of isolated savage tribes living in the hunter stage, without contact with more civilized races. The Australian savages, the South African bushmen, the Negritos of the Andaman Islands, may have lived as they were first found by Europeans, any time you like from 1000 to 100,000 years, for aught we know to the contrary. There is, in fact, no record of any such savage race emerging into comparative civilization by any effort or natural progress of its own. Even much more advanced races trace back their knowledge of the higher arts and civilization to some divine stranger, like the Peruvian Manco-Capac, or Chaldæan Oannes, who lands on their shores: or else, like the Egyptians, assign these inventions to gods, which means that they are lost in the mists of antiquity. The neolithic men of Europe were clearly invaders, who brought a higher

civilization with them from Asia, and the knowledge of polished stone and metals was diffused by commerce.

It is incorrect, however, to say that palæolithic man shows no signs of change or progress. On the contrary, the evidence of palæolithic deposits shows everywhere a progress which, although it may have been extremely slow, is uniformly in the same direction, viz., upwards. There is no exception in the hundreds, or rather thousands of instances in which palæolithic implements have been found, to the law that the rudest implements are found in the lowest deposits, and that improvements are traced in an ascending scale with ascending strata. This is most markedly the case in caves, where, as in Keat's Cavern, deposits of different ages have been kept distinct and securely sealed under separate sheets of stalagmite. In the rock-shelters also, and river gravels, in which the relative antiquity is proved by their higher or lower levels, the same law prevails. In the oldest, where the cave bear and mammoth are the characteristic fossils, the stone axes, knives and scrapers are of the rudest description. The celts or hatchets are mere lumps of stone, roughly chipped, and with a blunt butt-end, evidently intended to be held in the hand. In the next stage we find finer chipping, and celts adapted for hafting; while arrow and javelin heads appear, at first rude, but gradually becoming barbed and finely wrought. Still later, with the advent of the reindeer in large herds, affording in their horns a softer material than stone, a remarkable improvement takes place, and eyed needles, barbed harpoons, and in some cases engraved and sculptured portraits of animals of the chase, testify to a decided advance in the arts of civilization. Above all these, come the weapons and implements of the Neolithic age which, as already stated, are separated by a sharp line from the earlier records of palæolithic man. No polished stone has ever been found in deposits belonging clearly to the Palæolithic period, and a decided change has taken place in the fauna, which in the Neolithic age corresponds closely with that of recent times, in the same locality.

It is impossible, therefore, to deny that both change and progress have existed from the first appearance of man, and there are absolutely no data to enable us to say what may have been the intervals of time required for the successive stages of this progress. All we can say is, that the more nearly primitive man approximated to a state of semi-animal existence, the slower must have been the steps by which he emerged from it into comparative civilization.

We must fall back, therefore, on geology for anything like reliable data on which to base any estimate of the time required for the Quaternary or any preceding geological epoch. Here, at any rate, we are on comparatively certain ground. So many feet of deposition, so many of erosion, so many of elevation or depression; these are measurable facts which have been ascertained by competent observers. How much time required to account for them? This can only be an approximation,

based on our knowledge of the time in which similar results, on a smaller scale, have been produced by existing natural laws within the Historical period. Still, if we argue from natural causes, and ignore imaginary cataclysms and supernatural interferences, we may arrive at some sort of *maximum* and *minimum* limits of time within which the observed results must lie.

This was the process by which Lyell and his school of geologists arrived at their estimates of geological time, and it is only by a careful study of their works that it is possible to see how closely the chain is woven, and what a mass of minute investigations support their conclusions. The one solid fact which Prestwich opposes to them is the rapid advance of the glaciers of Greenland. Recent observations by Rink and other explorers have shown that the fronts of these glaciers advance much more rapidly than the rate which has been assumed from the advance of the Swiss glaciers.

The average rate of advance of the great glaciers which discharge themselves into Baffin's Bay is about 35 feet daily, or $2\frac{3}{4}$ miles yearly. Calculating from these data, Prestwich arrives at the conclusion that the old ice-sheets which radiated from the Scandinavian and Canadian mountains to a distance of about 500 miles, might have been formed in from 4000 to 6000 years. The great changes which have taken place since the retreat of the ice-sheets, he accounts for by supposing that with a greater rainfall these changes went on much more rapidly than they have done during the Historical period. These views, however, did not command the assent of other eminent geologists, who were present when Professor Prestwich's paper was read, and they are open to very obvious objections.

The rate of advance of a glacier thrust outwards by such an immense mass of ice as caps Greenland, through a narrow fiord, on a steep descending gradient, into a deep sea which floats off its front in icebergs, affords little test of the advance of an ice-sheet spread out with a front of 1000 miles over a whole continent, unaided by gravity, and obstructed by ranges of mountains 2000 or 3000 feet high, which it has to surmount. Nor does the rate of advance of such a sheet afford any clue to the time during which it may have remained stationary, or been receding. The two latter conditions evidently depend on the climate at the extremity of the ice-sheet, when the ice pushed forward by it is melted by the summer heat. As long as the climate of Switzerland remains the same, the Swiss glaciers will remain at their present level, with slight local and temporary variations; and this must have been equally true of the great Scandinavian and Canadian glaciers. They may have advanced in 5000 years, remained stationary for 50,000 years, and taken 100,000 years to retreat, for anything we know to the contrary, from the Greenland glaciers. Nor is it a question of one advance and retreat only, for there is distinct evidence of several advances and retreats, and of prolonged Inter-Glacial periods.

In the cliffs of the east of England four boulder-clays are found, sepa-

rated by sands and gravels deposited as each ice-sheet successively receded and melted ; and in France there is evidence of at least one Inter-Glacial period, sufficiently warm and prolonged to allow the Canary laurel and fig-tree to supplant the lichen and Arctic willow. The only real test of time is from the amount of geological work that has been done in the way of denudation, deposition, elevation, and depression, since Northern Europe and Northern America were covered by such an ice-cap as now covers Greenland.

Tried by these tests the conclusions point uniformly to a longer rather than a shorter duration of the Quaternary, including the Glacial period. If we take denudation, we may refer to the fact that since palæolithic man left his implements on the banks of the old Solent river above Bournemouth, the level of its valley and of the adjacent land has been denuded by that small stream to a depth of 150 feet, and the erosion of the sea now going on at the Needles has eaten away a wide range of chalk downs, which were then continuous from the Isle of Wight to Dorsetshire. The same action of waves and tides as is now eroding Shakespeare's Cliff has removed the chalk ridge between that cliff and Cape Grisnez, and made England an island. The valleys of the Thames, the Somme, and other rivers of the south of England and north of France, have been excavated to a depth of more than 100 feet and a width of miles, by streams which have produced no perceptible change since the Roman period. And a still more striking proof of the immense time which has elapsed since the Glacial period is afforded by the fact stated in Prestwich's *Geology*, that the great basaltic plateau of the Cascade Range in British Columbia, which is cut through by the Columbia river to the depth of 2000 to 3000 feet, is underlain by the Northern Boulder-drift. Consider what a lapse of time this requires. Since the Boulder-drift, and therefore since the Glacial period, vast sheets of basalt must have been poured out by volcanoes now extinct, and those sheets of hard rock cut down by river action to the levels at which the relics of the old ice-cap now appear.

As regards the erosion of valleys, it is said that there may have been a much greater rainfall formerly than in historical times, and therefore erosion may have gone on much more rapidly. Doubtless there may have been more extensive inundations while great masses of ice and snow were melting under the summer heat of an improving climate, but there seems no adequate reason to account for a much greater rainfall. The maxim "*ex nihilo nihil fit*" applies to rain as to the other operations of nature, and more rainfall implies more evaporation, brought by warm winds blowing over warm oceans, and deposited when it comes in contact with land at a lower temperature. We already have these conditions in Western Europe, and the Gulf Stream and prevalent westerly winds make the climate more moist and genial than is due to the latitude. To have had it still more moist these conditions must have been intensified, and there is no reason to suppose that in recent times, and with the present configura-

tion of sea and land, the Gulf Stream could have been much warmer than it now is. If the land had extended farther to the westward, the effect must have been to diminish rather than increase the rainfall in the districts where the Somme and the Thames were excavating their valleys ; and with more extensive forests and morasses rain-water would be absorbed as in a sponge, and descend more gradually and less in tumultuous floods.

But even if a greater rainfall were granted, it would not affect the erosion of solid chalk cliffs by the sea, and the argument from the disappearance of the downs between the Isle of Wight and Dorsetshire, and between France and England, would remain the same. Sir John Lubbock estimates the rate of erosion of a perpendicular cliff of solid chalk at only a few inches per century, at which rate it must have taken an enormous time to wear away the chalk ridge between the Needles and Ballard downs ; but even if we read yards, instead of inches, it must have taken a far longer time than Prestwich assigns for the whole Glacial period. There is nothing upon which reliable data are more wanted than as to the rate of erosion of solid cliffs by the action of the sea, for here the hypothesis of a larger rainfall and greater floods could not be invoked to accelerate the rate, as in the case of the erosion of valleys.

If from denudation we turn to deposition, we find equally conclusive evidence of the immense duration of the Glacial period. The deposit known as "loess" is universally admitted to be one of fine glacial mud, deposited tranquilly from sheets of inundation water, which have overflowed wide tracts during the melting of the ice and snow, as the climate improved and glaciers retreated. It is, in fact, just such a loam as the Arve deposits every summer on the meadows of Chamouni, when the turbid river issues in a swollen stream from the bottom of the mer-de-glace, and overflows its banks. Now this loess covers, as with a mantle, the valley systems of all the great rivers of the Northern hemisphere, whose upper courses lie within the area which was covered by ice and snow during the Glacial period. The Rhone, the Rhine, the Danube, the Mississippi, the Yang-tse-kiang, all run through cliffs of loess, which also fills their tributary valleys and spreads to a considerable height up the slopes of the hills and over the adjoining plateaux. It lies thickest in the valleys, dying off as it ascends the slopes, though it can often be traced to a height of 2000 or 3000 feet. The thin beds of loess at these heights, and on the plateaux, are probably the result of the melting of frozen snow ; but the great masses in the valleys are evidently the accumulations of mud from the overflows of the existing rivers, as they gradually cut their valley-systems down from higher to lower levels.

These accumulations invariably correspond to the configuration of the existing valleys, and overlies coarser sands and gravels, showing that they have been made since the rivers lost the transporting power which they possessed, when they ran with a more rapid current during the earlier

stages of the retreat of the glaciers. The thickness of this accumulation of fine mud is stated by Lyell to be 800 feet or more above the existing alluvial plain of the Rhine, and in other rivers it is even greater. It is impossible that such a thickness could have been accumulated in anything like the shorter time assumed by some geologists for the duration of the whole Glacial period. And yet it represents only one phase of its concluding period, and it not only contains human remains but is itself clearly posterior to many of the sands and gravels in which remains of man and his associated Quaternary fauna have been undoubtedly found.

It is difficult to suppose that the loess can have accumulated much more rapidly than the alluvium of the Nile, which has been proved to raise the soil of Egypt at the rate of about three inches in a century. At this rate it would require 320,000 years to accumulate the 800 feet assigned by Lyell to the loess of the Rhine valley. Making every allowance for a quicker rate of deposition, it seems impossible that this deposit, which is only an interlude in one of the later stages of the Glacial period, can have been accumulated in anything like the time assigned by Prestwich for the whole of that period.

If we consider the elevations and depressions of land which have taken place since the commencement of the Glacial period, the evidence all points to the same conclusion of immense antiquity. There is a distinct evidence that since the first epoch of intense cold a great part of Britain has been surmerged, until only a few of the highest mountains stood out from the Arctic Sea as an archipelago of frozen islands and has been since elevated, with several minor fluctuations, to its present height. Marine shells of an Arctic character have been found on Moel-Tryfan, a hill in North Wales, in glacial drift 1392 feet above the level of the sea, and similar drift is traced continuously, both in Wales and Scotland, to a height of over 2000 feet. It rests on rocks which had been already rounded and polished by glaciers.

It is evident, therefore, that sufficient time must have elapsed during an intermediate phase of the Glacial period, for a depression of more than 2000 feet, followed by a re-elevation of an equal amount. Consider what this means. All we know of these secular movements of large masses of land shows them to be excessively slow. Even the small local elevations and depressions, like those of the temple of Serapis at Pozzuoli, which have taken place principally in volcanic districts, have not exceeded a few feet in historical times.

The deltas of rivers have increased, and the sea has sometimes eroded and sometimes added to the outline of coasts, but there has been no change for more than 2000 years in the general level of sea and land in any of the districts known to the ancient world. The spit of shingle which connects St. Michael's Mount with Cornwall, is still covered at flood and dry at ebb tide, as when the ancient Britons carted their tin across it to barter with Tyrian merchants. Marseilles is a sea-port, as it

was when the Phocæan galleys entered its harbor. In Egypt it is evident that no considerable change of level, either of the land or of the Mediterranean, can have occurred since Menes embanked the Nile 7000 years ago.

The only authentic record we have of the rise or fall of masses of land as ascertained by actual measurement, are those of Scandinavia and South America. The Pacific shore of the latter was upheaved five or six feet for a distance of 500 or 600 miles, by the shock of a single earthquake, and remains of human art, such as plaited rushes and string, have been found in a bed of marine shells near Callao, showing that this part of the continent had been elevated eighty-five feet since it was inhabited by man. This, however, gives no clue to the rate of elevation, since we know nothing of the date of man's appearance in Peru, and the whole area is one of volcanic disturbance, which has been raised by successive earthquake shocks, and not by gradual elevation.

In the case of Scandinavia, however, where raised beaches up to the height of 600 feet above the sea level afford proof of much recent elevation, and where there are no signs of volcanic action, attempts have been made to measure the rate accurately by marks cut on rocks. The results, carefully considered by Sir C. Lyell, show a slow, uniform rate of elevation of two or three feet in a century, where the rate is at its maximum at Gefle, ninety miles north of Stockholm, which dies out towards the North Cape, and is converted into a slow depression in the south of Sweden. At this rate of three feet per century the depression which carried the hills of Wales and Scotland 2000 feet down would have required 66,666 years, and its elevation an equal period, so that without any allowance for the time the sea-bottom may have remained stationary, this interlude of the Glacial period would have required 133,333 years. Of course, it is not implied that this was the real time, or that the rate both of elevation and depression may not have been faster; but all the evidence points to its having been gradual and not paroxysmal, as there are no traces of any contemporaneous earthquakes or volcanoes in Wales or Scotland. And whatever the rate may have been it is scarcely possible to suppose that it can have been such as to enable us to compress the whole Glacial and Post-Glacial periods, of which this was only one of the intermediate phases, within anything like the limits of from 25,000 to 35,000 years assigned to them by Professor Prestwich. On the contrary, all the evidence from existing known facts points rather to an extension than to a contraction of the time assigned by Lyell and Croll, and if the theory of the latter is correct, it would almost seem as if his first period of *maximum* refrigeration, 700,000 years ago, was that of the formation of the first great ice-cap. And whatever the time may be, it is clear that in its earlier stages man was already widely distributed over the earth, while there is the strongest probability that his origin must have

taken place very much further back in the Pliocene or even in the Miocene period.

It must always be remembered that while the date of human origins in years or centuries is a question of great scientific interest, it makes little difference, as regards the religious and philosophical aspects of the question, whether it extends over 50,000 or 500,000 years. In any case, the fact is beyond question, that it is one of immense antiquity, far transcending any period recorded by history or tradition, and that during this immense period the course of humanity has been upward and not downward. Man has not fallen but risen, and arts, morals, societies, and civilization have been slowly developed from an animal-like condition of the lowest savagery.

Perhaps the issue between the long and short dates of the Glacial period can be most closely joined if we take that portion of it which comes nearest to historical times, and is known as the Post-Glacial. Prestwich assigns to this period a duration of "8000 to 10,000 years or less," that is a duration of not more than 2000 or 3000 years before the time when we know for certain that a dense population and high civilization already existed in Egypt and Chaldæa. I am not aware that he assigns any reason for this highly improbable date, except the conjecture that the erosion of river valleys may have gone on more rapidly, owing to a greater rainfall.

Now the duration of this Post Glacial period is a question, not of conjecture or theory, but of a vast number of definite and measurable facts. In the British Islands these facts have been carefully examined and ascertained with great accuracy, mainly by the labors of the Geological Survey. An eminent officer of this Survey, Mr. T. Mellard Reade, who has worked for many years at these beds in Lancashire and Cheshire, and is one of the best authorities on the subject, read, as recently as in February, 1888, a paper before the Geological Society, in which he gave a minute description of the successive changes in Post-Glacial times, by which the Mersey valley and estuary were brought into their present condition, with an estimate of the time they may have required. His estimate is "that in round figures 60,000 years for Post-Glacial time is a reasonable one and, as represented by these changes, well within the mark."

This is not a random estimate, but based on a careful calculation of the different changes which are shown by sections and borings to have actually taken place. At the close of the Glacial period the district was submerged, and the valleys of the old Pre-Glacial rivers were levelled up to a height of at least 200 feet by marine boulder-clay. The land then rose until its surface became an undulating upland plain, through which the present rivers began to cut the existing valleys. A mass of boulder-clay 200 feet in depth, and several miles in width, must thus have been removed by sub-aërial denudation before the next stage, which consisted of a general depression of the area, as is proved by the fact that borings

show a series of estuarine deposits with marine shells in places fifty feet thick, overlying the boulder-clay, and levelling up the inequalities of its surface due to sub-aërial erosion. Above these silts and clays is a peat-bed containing stools of trees with their roots running down into the clays below. This is a remarkable deposit, for a similar submerged forest bed is to be traced all round the shores of the British Islands, from Devonshire to the Orkneys. Evidently at a recent period, geologically speaking there has been an age of forests which flourished, and in their decay formed great beds of peat, in localities where no trees have grown, within the Historical period. Before these forests could have grown, the marine silts and clays must have been elevated above the sea to a sufficient height to become dry land and covered with trees, and the climate must have been very different from that at present prevailing. It must have been more of a continental and less of an insular climate, and in all probability the German Ocean was then dry land, and the British Islands were connected with an Europe which extended westward up to 100 fathom line. In no other way can the existence of surmerged forests, and vast masses of peat with remains of trees, be accounted for in such isolated islands as those of Orkney and Shetland, now swept by ocean blasts, and where no vestige of a tree has grown for at least 2000 years, when a Roman author described them as "carentes sylva."

But at whatever height the land may have stood during this Forest period, it is evident that it must have subsided, at any rate to the extent necessary to bring the submerged forests to their present level of some feet below low-water mark. Or, indeed, some twenty-four feet more, for there is evidence that a rise to this extent has taken place, quite recently, along a considerable portion of the British coast, as shown by raised beaches. When I say recently, I mean in geological time, for in historical time there has been no appreciable change of level since the occupation of Britain by the Romans, or for nearly 2000 years.

In other regions, however, we have still more conclusive evidence of the great length of time which has elapsed since any appreciable change has taken place in the physical geography of Europe, and in the present relative levels of sea and land. The localities described by Homer in the *Odyssey* can be identified, and the very cave and beach pointed out in Ithaca, on which Ulysses was landed by the Phœnician mariners. The annals of Egypt carry us back still farther, and show that no appreciable change can have taken place in the levels of sea and land in the Eastern Mediterranean, for at least 7000 years, and probably for much longer.

With these facts, even if we had no other evidence than that of the submerged forests, Professor Prestwich's estimate of 8000 to 10,000 years for the whole Post-Glacial period down to the present time seems totally inadequate, and Mr. Mellard Reade's of 60,000 years much more probable. In fact, it seems impossible that changes, such as those demon-

strated to have occurred in the Mersey valley, can have been accomplished within a period shorter than that which is shown by historical records to have elapsed in Egypt without perceptible change.

But whether the duration of the Post-Glacial period be more or less, it is evidently a small fraction of the time which is required to account for the work done during the preceding Glacial period, or rather periods, for there is distinct evidence that there were several advances and retreats of the ice-sheets, and alternations of climates, during some of which the winter temperature of Western Europe must have been higher than it is at present. The succession of ice-sheets is clearly shown by the sections afforded by the coast cliffs of the east of England, where four successive boulder-clays are shown, separated by masses of sand and gravel deposited during the melting and retreat of each ice-sheet. The alternations of mild Inter-Glacial with severe Glacial periods, is shown by the frequent presence in caves of a Southern fauna, some of which, like the hippopotamus—which is found as far north as Yorkshire—could by no possibility have lived in a country where the lakes and rivers were bound in ice for a great part of the year. And still more conclusively by the presence, in the south of France, of a vegetation comprising the fig-tree and delicate Canary laurel, in the region over which, at another period of the Glacial age, herds of reindeer roamed, feeding on lichens and Arctic-willows, and accompanied by the musk-ox, the glutton, the lemming, and other exclusively Arctic animals.

But although the evidence for the great antiquity of the Glacial period seems to be conclusive, it must be confessed that we are as far as ever from being able to assign any reliable explanation of the causes which produced it. It came on suddenly, for the interval between the temperate Pliocene and the extreme rigor of the first great ice-sheet is, geologically speaking, very short. Only a few feet of clay and sand separate the Cromer forest, in which the great southern elephant, the *Elephas Meridionalis*, and other southern mammalia roamed, from the boulder-clay of the Scandinavian ice-sheet, which carried rocks from Lapland and Norway, across the North Sea and over hills and valleys almost to the centre of Europe. This first period was the coldest, and after several oscillations of heat and cold, each apparently less intense than its predecessor, the climate of the Northern hemisphere finally settled down to its present conditions.

These facts seem to negative most of the theories, or rather guesses, which have been hazarded to account for this great and sudden refrigeration. It could not be due to any cooling of the earth, for this must have been gradual and progressive, and the great cold of the first period instead of decreasing and disappearing, must have gone on increasing. It has been supposed that the solar system, on its journey through space, may have entered into, and emerged from, regions very much colder than those of former ages or at present, but such a cause is at present little

more than a conjecture. Nor is it possible that any alteration in the position of the earth's axis can have occurred within the earth, for this would have disarranged its equatorial protuberance, which is precisely that of a fluid mass, rotating about the present axis, and could not be altered without producing a complete cataclysm. No one can suppose that an equatorial protuberance of more than 20 miles can have been shifted through many degrees of latitude, during the short interval between the close of the Pliocene and the commencement of the Glacial period.

Neither can the theories which have been applied to earlier geological epochs, of a warmer blanket of watery vapor and carbonic-dioxide in the atmosphere, account for such a sudden refrigeration and its gradual disappearance. The conditions under which the Pre-Glacial Cromer forest flourished, and those at present existing in the same locality, cannot have been so different as to imply a new order of cosmic or telluric causes.

There remain only two at all plausible theories, the astronomical one of Croll, and that of Lyell, who explains everything by a different configuration of sea and land. Croll's theory explains many of the facts admirably, but, as we have seen, it cannot be accepted with confidence, in the absence of proof that a succession of Glacial periods has occurred in previous geological epochs. Nor is it very consistent with the fact that the cold period come on suddenly, and was greatest at first; while if due to the eccentricity of the earth's orbit, it ought to have come on gradually, and only attained its *maximum* simultaneously with that of the eccentricity. Lyell's theory is on the whole most generally accepted, as actual experience shows that high land in high latitudes is a cause of glacial conditions, and also that oceanic currents are a main factor in producing climate.

When we inquire under what conditions great glaciers are now formed, we find them to be mainly heavy snow-fall combined with low temperature. Thus the snow-fall is very heavy on the Pacific slope of the Sierra Nevada and coast range of Northern California and British Columbia; but it does not, as formerly, produce glaciers, because the temperature is not low enough to convert the winter snow into the frozen "névé" which is the source of glaciers, and to produce the conditions under which the accumulation finds its way to lower levels by solid rather than by fluid rivers. Again, extreme cold does not of itself produce glaciers, as is seen in Northern Russia and Siberia. The influence of ocean-currents is also apparent from the effects of the Gulf Stream, which gives open winters to the coasts and islands of Western Europe, in a latitude as high as that of the southern extremity of Greenland.

Here, then, are real causes which may account for such a Glacial period as has been experienced, without invoking utterly unknown and conjectural theories. But there are considerable difficulties in the way of

accepting Lyell's theory as the sole and sufficient explanation. The suddenness with which the great cold came on is one of them. It is difficult to suppose that such a great elevation of land in the North Atlantic as would be required, took place, almost at once, in the short interval in which the Pliocene passed almost continuously into the Quaternary. We are tolerably certain, from the similarity of the fauna and flora, that America was connected with the Old Continent during the Miocene period by a land passage across the North Atlantic, and yet there are no traces of a rigorous climate. On the contrary, a climate almost sub-tropical prevailed then in Greenland and Spitzbergen, far within the Arctic Circle.

Again, the Gulf Stream must always have been an important factor in determining the climate, but recent theories as to the great geological antiquity of the Atlantic Ocean make it difficult to conceive how this Stream can have been greatly diverted from its present course, in recent geological times. And the fact that the ice-cap extended much farther to the south in North America than in Europe, makes it almost certain that the influence of the warm Gulf and cold Polar streams must have been felt during the Glacial period, as they are now. How otherwise can we account for the fact that the difference of temperature between Europe and America seems to have been almost the same during the period of extreme cold in both, as it is now under temperate conditions? And the diversion of the Gulf Stream would certainly tend to produce less evaporation in the North Atlantic, and therefore less fall of rain or snow on Northern lands, whereas the contrary is required to account for the ice-caps. We must conclude, therefore, that while Lyell's theory affords the most probable explanation, we are still in a state of great uncertainty as to the causes which may have co-operated in bringing about the last and greatest vicissitude of climate, the Glacial period, which is so interesting to us from its close connection with the origin of man. The causes and duration of the last Glacial period, and whether there have been several, and if so, how many of such periods in former geological ages, are among the problems of the future which are pressing for solution.

CHAPTER V.

TERTIARY MAN.

OF all the discoveries of modern science, that of the antiquity of man has been the most startling. It is not like the abstract discoveries of astronomy and geology, which only indirectly affect the unscientific mass of mankind. It shatters at a blow what had been for centuries the axioms of the whole Christian world, respecting the origin of man, his place in creation, and the course of his development. A literal acceptance of the dates and narrative of Genesis was assumed to be the sole basis of knowledge on the subject, and to question what was told by a Divine revelation was universally considered to be alike ridiculous and impious.

As far as science had a word to say it was thought to confirm theology, for did not Cuvier himself lay down as an axiom that no human remains had been found in a fossil state, or in conjunction with the remains of any of the extinct animals? And although a few scientific men here and there, basing their ideas mainly on the dates of Egyptian monuments, pleaded for a somewhat longer period than the date assigned by Archbishop Usher, there may fairly be said to have been a universal consensus of opinion among all men, learned or unlearned, that the existence of the human race on our planet had not lasted longer than some 6000 or 7000 years before the present period. This was the universal opinion only thirty years ago, when in 1859 Mr. Prestwich read his memorable paper to the Royal Society, confirming the discoveries of M. Boucher de Perthes, and proving beyond a possibility of doubt that flint implements, fashioned by human hands, were found in Quaternary gravels, and brick-earths of the valley of the Somme, in juxtaposition with remains of the mammoth and other extinct animals, which must have been deposited when the river ran at more than 100 feet above its present level. The careful exploration of the Devonshire caves of Brixham and Kent's Hole, by committees of competent geologists, removed the last doubts on the subject, and since then, evidence has accumulated so rapidly from all quarters of the world, that the existence of Quaternary man has become as certain a fact as that the earth revolves round its axis.

Consider what this implies. The Tertiary epoch, in which mammalian life for the first time appears prominently and an approximation is made to existing conditions, is itself but a small fraction of the succession of

geological ages since our planet became the abode of animal and vegetable life. At the outside, its three divisions of Eocene, Miocene, and Pliocene, may together represent one-twentieth part of the thickness of fossiliferous strata from the Cambrian to the Cretaceous. The Quaternary period again is but a fraction of the Tertiary; and the recent or existing epoch, including the Historic and Pre-Historic, is but a fraction of the Quaternary. The recent or Historical epoch, characterized by the existing fauna, and, in the main, by the existing climate and disposition of sea and land, is certainly not less than 7000 years old, when Egyptian records and monuments shows us a populous and highly civilized nation already existing in the valley of the Nile, and civilized empires of almost as early a date in Chaldæa and China. The Pre-Historic period, characterized by the existing fauna and by neolithic man, must have lasted much longer, before such empires could have been developed from the rude and primitive civilization shown by the Scandinavian Kjekken-middens, the Swiss Lake-dwellings, and other early records of the Neolithic period. Borings in the Nile valley have everywhere brought up rude pottery, and other neolithic remains, from depths below the foundations of the oldest historical monuments, which, at the present rate of silting up by the annual inundations of the river, imply an antiquity of about 18,000 years. This may not be quite accurate as a chronological standard in years, but undoubtedly this, and other similar calculations from physical changes during the Neolithic period, all point to the conclusion that 15,000 or 20,000 years is the shortest time that can have elapsed since its commencement.

Then comes a great break. The climate, geographical and physical conditions, and fauna, have undergone great changes when we next meet with traces of man, and the Quaternary period stretches back into the Pliocene, through an immense though unknown duration of time. This much however is known, that it embraces two, if not more, great Glacial periods, during the first and most severe of which the northern halves of Europe and America were buried under an ice-cap, in places 5000 or 6000 feet thick, resembling that of modern Greenland, and driving all terrestrial life before it into more southern regions. These Glacial periods alternated with long Inter-Glacial ages, when the ice retreated, and vegetation and animal life again returned to their old abodes, and again advanced and retreated, finally occupying their present stations when the glaciers had shrunk into the valleys of the loftier mountains.

It is certain also that vast changes in the physical geography, and configuration of sea, land, and rivers, occurred during this period. The British Islands, or a large portion of them, were at one time submerged to a depth of certainly 1500, and probably 2000 or 2500 feet beneath an Arctic sea, presenting nothing above it but an archipelago, of what are now mountain peaks; while at another time they were part of an European continent, then connected with Africa, and across which huge extinct

lions, tigers, bears, elephants, and rhinoceroses roamed, and left their remains in the caves of limestone districts, and the sands and gravels of rivers, when they flowed 100 feet or more above their present level. During part of this period a southern fauna, and even the hippopotamus, found their way as far north as Yorkshire, testifying to the existence of great rivers flowing from the south across this Quaternary continent.

Now three facts have come out clearly from the latest research.

1. That man is a characteristic member of this Quaternary fauna just as much as any of these extinct animals ; or, in other words, that wherever you find the mammoth, cave bear, or woolly rhinoceros, you may expect to find man; and where you find man in old deposits, you may expect to find the mammoth, cave bear, and rhinoceros.

2. That the man whom you thus find is "Palæolithic man," that is, man in such a rude and savage state that he has not yet attained the art of polishing stones, and uses implements roughly fashioned by chipping from flints or other hard stones of the district.

3. That these rude implements are found in the caves and gravels of the Quaternary period in Europe, Asia, Africa, and America; in fact, throughout the whole world, so far as it has been hitherto explored; and whenever they are found, the rudest and earliest implements, such as stone hatchets or celts, and flint flakes and scrapers, are almost identically of the same type.

These facts have such an important bearing on the origin of the human race, that it is desirable to consider them in some detail.

The discoveries, both of implements and of human skulls and skeletons, have now been so numerous, especially in the caves of France, England, Germany, and Belgium, that it has enabled geologists not only to prove the existence of Quaternary man, but to a considerable extent to analyze and classify the successive stages of his progress.

The earliest is that known as the Cave-bear epoch, which occupies the lowest position in the oldest caves, and in which the rudest human implements are found associated with a preponderance of bones belonging to this formidable animal. Thus in Kent's Cavern, in Devonshire, we have in descending order—

1. A layer of black mould, near the entrance, from three to twelve inches thick, containing successively relics of the Historical and Neolithic periods, and bones of existing species of animals.

2. A bed of granular stalagmite from one to three feet thick, securely sealing all below it.

3. Red cave earth, in places five to six feet thick.

4. A bed of older crystalline stalagmite, in places twelve feet thick.

5. Breccia of angular stones; red-clay and bones to the rock floor of the cave.

In the lower deposits (4 and 5) the bones are numerous, but almost exclusively those of the cave-bear, and a few human implements have

been found, including a flint *hâche* or celt in the breccia, which is the oldest deposit of all. In the upper stalagmite, and cave-earth beneath it, were found numerous human implements of various sorts, including a bone needle and barbed harpoon, associated with remains of lion, cave-bear, mammoth, rhinoceros, hyena, reindeer, Irish elk, and other usual animals of the Quaternary fauna, including one tooth of the *Machairodus* or sabre-toothed tiger, which is characteristic of the Pliocene fauna.

Similar facts have been recorded in such a multitude of caves in France, Belgium, and Germany, especially in those of the South of France, that it is a perfectly well-established fact that the Palæolithic period may be divided roughly into three groups: an upper one, in which the reindeer was very abundant, and human implements showed a considerable advance in civilization; a middle stage, in which the reindeer was scarcer and the mammoth more abundant, with ruder human implements, though still showing considerable design; and the lowest of all, with fewer remains of the mammoth and more of the cave-bear, and with fewer implements, and those exclusively of stone of a very rude type.

This is exactly what might be expected if the theory of evolution applies to the human race. The first dawn of intelligence when primitive man emerged from the animal state, would show itself by his picking up natural stones to use as tools or weapons of offence. He would naturally select stones of the type of the *hâche*, with a sharp point for crushing in the skull, and a blunt butt-end to give weight to the blow and a firm grasp for the hand. This would hardly require more intelligence than that of the gorilla, who, living in forests, uses branches of trees as clubs; or of apes, who throw stones at enemies. The next stage would be to improve natural stones, or supply them if deficient, by chipping, so as to give a sharper and more solid point or edge, and a similar process would apply to flint chips used as knives or scrapers.

After a while, some genius would discover that by hafting the *hâche*, and attaching it as a lance to a long handle, he could kill without coming to such dangerous close quarters as was necessary when striking with the hand. This would lead to finer chipping, both to ensure penetration at the point, and to fit the butt-end for attachment. And finally, the invention of the bow would lead to diminished size and still finer chipping for the arrow-head. From this point the progress can be readily traced to the invention of barbs for arrows and harpoons, and the occasional substitution of bone for stone, as being more easily scraped into the desired form; and from these the evolution is uninterrupted up to the beautifully finished weapons of the Neolithic and Bronze periods. But the starting-point is the rude stone *hâche*, such as is universally found in the oldest deposits of caves and river gravels.

There has been a good deal of discussion as to the purposes for which these implements were employed, but there can be little doubt that their primary use was for killing large game and human enemies. The bush-

men of South Africa, who represent most nearly this primitive savage state, use for the purpose implements so closely resembling those of the river drifts, that some of those exhibited at the Colonial Exhibition, and labelled "*pour le gros gibier*," might have been specimens from Amiens or St. Acheul.

A good deal of discussion has also taken place among British geologists as to the exact place, with reference to the great Glacial periods, occupied by the earliest drift and cave implements which have been found in this country. Most of them are Post-Glacial, that is, later than the retreat of the last of the two or more great ice-caps which extended over all except a few of the southern counties of England during the Quaternary period. Some, however, are clearly proved to be either Inter-Glacial or Pre-Glacial, being overlaid by boulder-clay, as at Brandon, and in the caves of Cae Gwyn in North Wales; while as to the lowest deposits of many caves, as, for instance, the lower stalagmite and bone breccia of Kent's Cavern, there is no distinct evidence except of extreme antiquity, though the presumption is strong that they are either Pre-Glacial or Inter-Glacial. Mr. Pen-gelley, who has devoted years of research to Kent's Cavern, expresses an unhesitating opinion that the lowest deposits are Pre-Glacial.

As fresh evidence accumulates, it all points towards the existence of man on British soil in Pre-Glacial, or very early Glacial times, and therefore to carry it back far beyond the period assigned to it by Post-Glacial geologists.

Thus, quite recently, rude palæolithic implements of unmistakable human design have been found near Wye, in Kent, at an elevation of upwards of 300 feet, in a gravel which does not correspond with the existing valleys, but which overspread the chalk plateau of the North Downs, and was drained by rivers running southwards in a directly opposite course to that of the present streams. Professor Prestwich, whose bias, as we have seen, is towards shortening the period of man's antiquity, after a personal examination of the locality, came to the conclusion that this drift was immensely older than the ordinary high-level gravels of existing rivers, and in all probability was Pre-Glacial.

Since Professor Prestwich's paper was read, similar palæolithic implements have been found by Mr. Worthington Smith, on the chalk downs near Dunstable, up to a height of 759 feet above Ordnance datum, and some of them embedded in the brown clay which, with gravel, covers the chalk. But the question of the evidence afforded by England is comparatively unimportant, for the wider induction of continental experience settles conclusively the general relations of palæolithic man to the Quaternary period. It is absolutely certain that in the later stages of the palæolithic record, when man had already made considerable progress, and was able to draw and carve figures of the contemporary animals with a good deal of artistic skill, vast herds of reindeer roamed over the plains of Southern France and Germany, accompanied by a group of Arctic animals, such as

the musk-ox and the lemming, which are found even on the Italian side of the Alps. When this was the case in Southern Europe, it is evident that all its northern portion and higher mountains must have been covered by ice and frozen snow, and one of the great Glacial periods must have been in full force. All earlier deposits, therefore, in which ruder implements and a more temperate or even African fauna are found, must of necessity have been either Inter-Glacial or Pre-Glacial, and there is no reasonable doubt that the earliest of such deposits date back at least to the earlier stages of the Quaternary period. We must recollect that when we talk of geological periods, there was no real break in the succession of time. We merely use a convenient expression to distinguish those formations, between which the evidence of the regular progression of development has been lost for such a long period, that when we find it again the characteristic fauna and flora have undergone a marked change. But the idea of cataclysms and of repeated destructions and miraculous renovations of the whole vegetable and animal worlds, is completely exploded, and every day affords fresh evidence of the gradual process of transition from one so-called epoch or formation to the succeeding one. Thus types and even species appear sparingly in one formation become abundant in another, and finally die out and disappear, or persist with slight modifications, as we see in the first appearance of fish in the Silurian, and of reptiles in the Carboniferous eras, in each case in one or two geological periods before they become the predominant type. This applies specially to the relation of the Quaternary to the Pliocene and Miocene periods. It is difficult to say definitely where one begins and the other ends. Thus not only do most of the great Mammalian genera persist from the Miocene through the Pliocene and Quaternary, down to the recent periods, but some specific forms, such as the tapir, have continued unchanged; while the ox, bear, horse, wild boar, and other species first found in the Pliocene, survive through the Quaternary to the present day.

The gravels and sands of St. Prest the forest bed of Cromer, and other Pre-Glacial formations, contain such a mixture of characteristic mammals, that some geologists have considered them to be Pliocene. while others have pronounced them to be Quaternary.

What we really can affirm with certainty is, that as soon as we find a Quaternary fauna firmly established, we find man forming an essential and characteristic part of it. Can he be traced further back into the Tertiary? The question involves points of the highest interest, for, as in the issue between short-time and long-time geologists as to the duration of the Glacial period, the issue really is between evolution and miracle.

Even if the Glacial or Quaternary periods were extended to the 200,000 years assigned to them by Lyell, Croll, Geikie, and other leading geologists, the difficulty as to man being a produce of evolution would be only postponed and not removed. By no possibility could such conditions of the human race as are found at the commencement of the Quater-

nary period have been produced by the natural laws applicable to the rest of the animal creation, unless man can be carried back into the Tertiaries.

For under what circumstances do we find undoubted traces of the existence of man upon earth, early in the Quaternary period? Not in small numbers, or in some limited locality, in which we may suppose the human species to have originated, and from which we can trace the different races slowly developing and radiating out to more distant regions. No, when we find them lowest in the Quaternary, we find them in large numbers, and practically all over the world, from China to Peru, and from Northern Europe to South Africa.

This is so important that I proceed to state the facts in some detail, and specify the localities in which stone hatchets and knives, of the rude type of the oldest river drifts and oldest cave deposits, have been found in Europe, Asia, Africa, and America.

The list is doubtless incomplete, and every day is adding to it, but it is already amply sufficient to prove the general proposition.

In England they have been found in the river drifts and deposits of the Thames, the old Solent river, and all the existing and Quaternary valley systems south of a line drawn across it, a little to the north of the Bedford Ouse; and in the caves of all the limestone districts of Yorkshire, Derbyshire, North and South Wales, Somersetshire, and Devonshire, and they are absent only in those northern districts which were covered with ice during the successive phases of the Glacial period. In France and Belgium they are met with in the oldest drifts of the valleys of the Seine, Somme, Meuse, Loire, Rhone, Garonne, and other rivers, and in almost innumerable caves and rock-shelters in all the limestone districts, from Liege and Maestricht to the Pyrenees, and on the Mediterranean coast at Mentone. In Spain and Portugal they appear in the drifts of the Tagus and Ebro, and in Italy in those of the Tiber and Arno. In Central and Southern Germany and Switzerland they are found in numerous caves and river drifts, often deeply buried under thick beds of the loess, or fine glacial mud, which was deposited during the melting of the great ice-fields.

In Asia these palæolithic implements, associated with extinct animals, have been found almost everywhere, where search has been made for them. They have been found in Asia Minor and Syria, in the Caucasus, in Mongolia, China, and Japan. India, which has been examined by competent geologists, affords the most authentic and complete record. Here they have been found in large numbers, both in the river drifts of the Nerbudda, Godavery, and other rivers, and in the laterite of Madras and other places, which is a loamy land-deposit similar to that of the loess of Europe and China. Implements almost exactly of the type of those of St. Acheul, though made of quartzite, as flints were wanting, have been found in Bengal, Orissa, the Deccan, Scinde, Assam, and other provinces; and some of them in deposits which, from the extinct

animals associated with them, experienced geologists are doubtful whether to consider as upper Pliocene or as the lowest Quaternary.

In Africa, well characterized palæolithic implements have been found in Algeria and in the valley of the Nile, and at the other extremity of the continent, at Natal and other places in Cape Colony.

America furnishes some of the most conclusive proofs, both of the extreme antiquity, and of the wide diffusion of man. Human implements, human skulls and bones have been found associated with the mastodon and other extinct animals, over nearly the whole area of the United States; in Mexico, Brazil, and in the pampas of Buenos Ayres and Patagonia; associated in South America with the Glyptodon and other extinct mammals of its peculiar fauna. In one instance, in Buenos Ayres, a human skull was found under a huge carapace of this extinct armadillo, which it was conjectured might have been used as a roof for a hut. In these South American cases, however, as well as in those which will presently be referred to from California, the geological age is uncertain, and they are considered by some to be evidences of Pliocene, by others of early Quaternary man; while in other instances they are probably Post-Glacial, or at latest, Inter-Glacial. But in one typical case, that of the discoveries of Mr. Abbot in the drift of the Delaware valley at Trenton, in New Jersey, there can be no hesitation in referring them to the same early Quaternary period as the corresponding finds in the oldest river drifts of Europe and Asia. The Trenton implements are of a granular argillite, exactly resembling in size and form the flint implements of the valley of the Somme; and they are found sometimes twenty feet deep, in an old bed of gravel, with large boulders, which is exposed in the cliffs of the river's banks. A portion of a human lower jaw was found at a depth of sixteen feet in the gravel, and also a human skull of a peculiar type, being small, long, and very thick.

We are able, therefore, to affirm as an undoubted fact, that at the earliest stage of the Quaternary period the human species not only existed, but was already widely diffused over four continents, and occupied nearly the whole surface of the habitable globe. How did man get there? Evidently by the same process by which other fauna become distributed over wide distances and extensive zoological provinces, that is, by migration from one or more centres, where the different species were first developed in the course of evolution. In the case of land mammals, this implies where there has been an uninterrupted land connection within recent geological periods.

There is no fact better established by geological and zoological research, than that the existing fauna are not uniformly alike throughout the world, but are located in separate provinces, bounded by some barrier of sea, mountain, or desert, insurmountable by the ordinary animal species. The most signal instance of this is that of the absolute separation of the two totally dissimilar faunas of Southern Asia and Australia, by the narrow

strait of Lombok, not above twenty miles wide, which is a deep sea fissure or channel, dating back to very remote geological times. On the other hand, in the north temperate zone of Europe and Asia one may travel from the Atlantic coast of Western Europe to the Eastern coast of China, without observing any marked change in the familiar fauna and flora, the extension of which to the British Islands and Japan, leaves no doubt that they recently formed part of the same continent; while the existence of so many of the same forms in North America, makes it certain that there was a land connection, at no distant geological date, between the Old and New Worlds, by what is now the North Atlantic, and probably also by Behring's Straits. The familiar instance of the absence of snakes in Ireland, shows clearly how this extension of a fauna was accomplished by gradual migration. Ireland was connected with England and with continental Europe long enough to enable most forms of the European fauna to occupy it. Herds of Irish elk, deer, oxen, wolves, and other animals roamed over it; but some of the slower moving reptiles had not had time to reach it before it became finally separated from England by St. George's Channel.

The only alternative to migration is the special miraculous creation of every separate species which has ever existed throughout the vast range of geological time, and, this idea is as thoroughly exploded as that of the absence of snakes in Ireland being due to the prayers of St. Patrick in the seventh or eighth century. It breaks down under the weight of the innumerable instances of special miracles, which must be invoked on the most trivial occasions. Thus it has been shown that more than 160 miraculous creations must have taken place to account for the separate species of land-shells alone, which are peculiar to the little group of the Madeira Islands.

Admitting, then, evolution to be the cause of the origin of species, and migration for their diffusion, it must be observed that the human species is specially organized for extensive migration. The structure of man, and his intelligence, even in the most rudimentary form, enable him to overcome obstacles and resist changes of climate and environment, which would be fatal to most of the brute creation. And as a matter of fact, in historical times we know that New Zealand and the Pacific Islands have been peopled by migration; and that races like the Bushmen, Esquimaux, and Australians, which come nearest to the state of primitive men, are essentially migratory. If the population of America were annihilated, with the exception of the Esquimaux and Fuegians, there is little doubt that they would creep onwards along the sea-coast, accumulating their Kjekkenmiddens as they went, until they had occupied the whole continent. But the process must necessarily have been a very slow one, and there must have been already a considerable population and pressure on the means of subsistence, before these Quaternary men could have spread over nearly the whole habitable globe, and left their remains where

we now find them. The fact that they are so found makes it certain that they must have had a long series of ancestors, and that the first origins of the human race must be sought in a vastly more remote antiquity. The immense time required for such migrations will be apparent when we consider that it is not only a question of traversing such great distances, but much more of becoming gradually acclimatized during the passage from Arctic, or temperate, through tropical regions. Evidently the existing Esquimaux or Laplanders could not reach Patagonia or South Africa, without passing through a wide extent of hot and pestilential country, in which the northern immigrants could only live by the gradual survival of new types adapted to the altered conditions.

Another well-established fact points to the great antiquity of the human race when those early palæolithic implements were so widely distributed. A sufficient number of skulls and skeletons have been found associated with these implements to enable ethnologists to classify them as belonging to essentially different races. Thus the skulls found in America all present distinctive characters of the high and narrow type now existing among the various native races of that continent. In Europe, those of the Canstadt type, which is considered to be the oldest, and of which the celebrated Neander-thil skull, is an extreme instance, are very dolicocephalic, or long-headed, with markedly projecting brows, differing essentially from those of the Cro-Magnon type, which represent an exceptionally tall race with a good cranial development, equal to that of many modern European races; while the Furfooz type again, is that of a dwarfish race, with small round heads, resembling the modern Laplanders. This diversity of race argues for a long departure from the original type, involving development through a long series of ages. We know from the Egyptian monuments that a period of 5000 years has been insufficient to produce any perceptible change in the type of the Negro and Copt, the Semite, and other races of Africa and Western Asia.

It is remarkable, however, that while this diversity of race type is thus early found, there is almost perfect identity among the early palæolithic implements found in regions the most distant from one another. Rude stone hatchets, knives, and scrapers, are of the same form and fabricated in the same way, whether they come from the gravels of the Delaware, the Thames, the Tagus, the Godavery, or the Yang-tse-Kiang; from the caves of Devonshire, the deserts of Mongolia, or the plains of Patagonia and South Africa. The only apparent exception is afforded by the stone implements found in the auriferous gravels of California, which consist mainly of rude stone mortars and pestles, resembling those used for pounding acorns by modern tribes of Digger Indians, inhabiting the same districts. This uniformity of industrial type over such wide spaces shows that the peopling of the earth by migration must have been effected while the human race was still in that uniform state of rudimentary intelligence, which had not got beyond the first stage of supplementing natural stones by rude chipping.

Thus far we have been going on ascertained facts, admitted by all competent geologists, but in taking the next step and carrying man back into the Tertiaries, we enter on new ground, where positive evidence is scanty and disputed, and where probabilities and theoretical preconceptions are to a great extent invoked to supply its want. Among English geologists especially, there still remains a strong desire to abridge as much as possible the time of man's existence upon earth. The evidence furnished by England, which has been almost entirely covered during recent geological times by two or more successive ice-sheets, is comparatively weak to carry back the evidence for palæolithic man, even into Pre-Glacial times, and some good authorities still contend for all such remains in this country being Post-Glacial. Others, again, of less weight, and the general public who have a smattering of science, have a vague fear that every extension of man's antiquity carries them further away from the old theological standpoint, and brings them nearer to the proof that man is the product of evolution from an animal ancestry. The evidence of facts has, however, become too strong to maintain this ground, and the Quaternary line of defence being broken through, the defenders of old ideas have fallen back on their next entrenchment, and insist that man, if not Post-Deluvian, or Post-Glacial, is at any rate Post-Tertiary.

We pass here from the region of facts universally admitted, into that of probabilities, and statements of facts which although probable in themselves, and apparently well authenticated, are still disputed by competent authorities. Let us first deal with the probabilities for and against the existence of Tertiary man. It is objected that an animal so highly organized and specialized as man, can hardly have come into existence in geological periods characterized by a fauna, so much nearer the primitive and generalized type of Mammals, as those of the Pliocene, and still more of the Miocene and Eocene eras. The answer to this is that such a highly specialized specimen of the anthropoid type as the *Dryopithecus* undoubtedly did exist in the Middle-Miocene. This, which was an anthropoid ape, as highly organized as the chimpanzee or gorilla, and of a stature equal to that of man, has been found in that formation in the South of France and in Germany. Now, looking at man simply as an animal, the anthropoid ape is just as much a specialized development of the primitive quadrumanous type as man. Monkeys and apes are specialized for life in forests and climbing trees, as man is for life on the earth and walking, but in their anatomical structure they correspond bone for bone and muscle for muscle. If there is any truth in evolution they must have descended, not necessarily one from the other, but both from a common ancestor.

Again, it is said that man could not have survived for such a succession of geological periods during which so many other species have died out and disappeared. But here again the answer is, that many of the animals which are associated with man as part of the Quaternary fauna, have in

fact survived unchanged from the Pliocene, and with slight modifications from the Miocene periods, and that man's larger brain, and consequently greater intelligence, must have given him a better chance of survival than in the case of elephants, rhinoceroses, oxen, and horses. If man could survive, as we know he did, the severe and extreme fluctuations of the different Glacial, Inter-Glacial, and Post-Glacial periods, what was there in the milder and more equable conditions of the Pliocene and Miocene to have prevented his existence?

The theoretical objections, therefore, to Tertiary man seem to be of the weakest and vaguest character, while on the other hand, the probabilities in its favor are so cogent as almost to amount to demonstration. How could man, early in the Quaternary period, have already found his way to the remotest regions of the globe, and developed a variety of types and races, if his first appearance on earth lay within the limits of that period? One might as well suppose that elephants, horses, and all the other mammals associated with man in the Quaternary period, sprung suddenly into life along with him by some act of miraculous creation, in the teeth of all the accumulated and irresistible evidence which shows them existing in the upper Tertiary, and traces their ancestry and lines of progressive development through the Miocene into the earliest Eocene period.

Having thus cleared the ground of probabilities, I proceed to state the positive evidence for discoveries of human remains in Tertiary formations, premising that it is nearly all the result of the last few years, and is rapidly accumulating; and that there is no reason to expect that it will ever be abundant, as the more nearly we approach to the time and place of man's origin, the narrower must be the area, and the fewer the stations, at which we can hope to find his traces, and the greater the effect of denudation in obliterating those traces.

The first well-authenticated instance is that of St. Prest, near Chartres, on the Eure, one of the tributaries of the Seine. Here the lowest gravels of the present river rest on gravels of what Lyell, after personal examination, considered to be an earlier Pliocene river, and which are characterized by the older forms of elephant and rhinoceros; the *Elephas Meridionalis*, and *Rhinoceros Leptorhinus*, instead of by the Quaternary Mammoth and *Rhinoceros Tichorinus*. In these older gravels have been found stone implements, and bones of the *Elephas Meridionalis* with incisions evidently made by a flint knife worked by a human hand. This was disputed as long as possible, but Quatrefages, a very cautious and competent authority, states in his latest work, published in 1887, that it is now established beyond the possibility of doubt. It is contended, however, by some geologists, that this formation, though always considered to be Pliocene until human remains were found in it, is in reality a very low stage of the Quaternary, or a transition bed between it and the Pliocene. The instance, therefore, cannot be accepted as absolutely conclusive for anything more than the existence of man at the earliest com-

mencement of the Quaternary period, though the evidence all points to the gravels being really Pliocene. The same uncertainty applies to the celebrated discovery by the Abbé Bourgeois, of flint knives and scrapers in the Miocene strata of Thenay, near Blois. When these were first produced, the opinion of the best authorities was very equally divided as to their being the work of human hands, but subsequent discoveries have produced specimens as to which it is impossible to entertain any doubt, especially the flint knife and two small scrapers figured by M. Quatrefages at p. 92 of his recent work on *Races humaines*. They present all the characteristic features by which human design is inferred in other cases, viz.: the bulb of percussion and repeated chipping by small blows all in the same direction, round the edge which was intended for use.

The human origin of these implements has been greatly confirmed by the discovery that the Mincopics of the Andaman Islands manufacture whet-stones or scrapers almost identical with those of Thenay, and by the same process of using fire to split the stones into the requisite size and shape. These Mincopics are not acquainted with the art of chipping stone into celts or arrow-heads, but use fragments of large shells, of which they have a great abundance, or of bone or hard wood, and the scrapers are employed in bringing these to a sharper point or finer edge. The main objection, therefore, at first raised to the authenticity of these relics of Miocene man, that they did not afford conclusive proof of design, may be considered as removed, and the objectors have to fall back on the assumption, either that the implements were fabricated by some exceptionally intelligent *Dryopithecus*, or that the Abbé Bourgeois may have been deceived by workmen, and mistaken in supposing that flints, which really came from overlying Quaternary strata, were found in the Miocene deposit. This hardly seems probable in the case of such an experienced observer, and had it been so, the implements might have been expected to show the usual Quaternary types of celts, knives, and arrow-heads, fashioned by percussion, whereas the specimens found all bear a distinct type, being scrapers and borers of small size, and partly fashioned by fire. The other supposition is based on no evidence, and contrary to all we know of the limited intelligence of any anthropoid ape. If it were true we might at once say that the missing link had been discovered, as a *Dryopithecus*, able to do what the Mincopics are now doing, might well have been the ancestor of man. On the whole, the evidence for these Miocene implements seem to be very conclusive, and the objections to have hardly any other ground than the reluctance to admit the great antiquity of man, which so long opposed itself to the recognition of the discoveries of M. Boucher de Perthes.

The same class of objection apply to the palæolithic hatchets found by M. Ribiero, in beds of the valley of the Tagus, at Olta, in Portugal, which have always been considered as being of the upper Miocene. It is thought possible that they may have fallen at some distant period from

overlying Quaternary gravels, and become mixed up with the upper bed of the Miocene. The congress of geologists, therefore, who met at Lisbon three years ago, thought it wise to suspend their opinion as to the Tertiary age of M. Ribiero's implements.

Other discoveries, however, of the same nature, seem to be absolutely conclusive for man's existence, at least as far back as into the Pliocene era. An Italian geologist, M. Gapellini, has found in the Pliocene strata of Monte Aperto, near Sienna, bones of the *Balæonotus*, a well-known species of a sort of Pliocene whale, which are scored by incisions obviously made by a sharp cutting instrument, such as a flint knife guided by design, and by a human hand. At first it was contended that these incisions might have been made by the teeth of fishes, but as specimens multiplied, and were carefully examined, it became evident that no such explanation was possible. The cuts are in regular curves, and sometimes almost semi-circular, such as a sweep of the hand could alone have caused, and they invariably show a clean cut surface on the outer or convex side, to which the pressure of a sharp edge was applied, with a rough or abraded surface on the inner side of the cut. Microscopic examination of the cuts confirms this conclusion, and leaves no doubt that they must have been made by such an instrument as a flint knife, held obliquely and pressed against the bone while in a fresh state, with considerable force, just as a savage would do in hacking the flesh off a stranded whale. Cuts exactly similar can now be made on fresh bone by such flint knives, and in no other known or conceivable way. It seems, therefore, more like obstinate prepossession, than scientific scepticism, to deny the existence of Tertiary man, if it rested only on this single instance.

As regards the evidence from cut bones it is very conclusive, for experienced observers, with the aid of the microscope, have no difficulty in distinguishing between cuts which have been made accidentally or by the teeth of fishes, and those which can only have been made in fresh bone by a sharp cutting instrument, such as a flint knife. In fact, the best authorities on the subject, such as M. Mortillet, the Curator of the Museum at St. Germain, M. Hamy, and M. Quatrefages, while admitting the authenticity of the cuts submitted to them in a few cases, have rejected it in numerous others, as in the well-known instance of the grooves on the bones of a rhinoceros, which Delaunay had found in a Miocene deposit at Billy.

The only incisions on bones from very early strata, which these experts have admitted as undoubtedly made by sharp cutting instruments held by a human hand, are those above mentioned, viz. : on the *Elephas Meridionalis* of St. Prest, and the Pliocene *Balæonotus* of Monte Aperto ; and in the humerus of a *Halitherium* from the Upper Miocene of Pouancé (Maine et Loire). This shows with what caution and scrupulous good faith the experts have worked, who bear testimony to facts, which if admitted, are a conclusive demonstration of the existence of Tertiary man.

But in addition to these instances from cut bones, there are others equally certain and well-authenticated. In the region of the extinct volcanoes of Auvergne, in which the celebrated fossil man of Denise was discovered under a stream of lava, embedded in a volcanic tuff, which however, was considered to be probably Quaternary, there are older lava streams overlaying tuffs and gravels, which, from the fossils contained in them, are undoubtedly Tertiary. From one of these Tertiary gravels at Puy-Courny, M. Rames, a competent geologist, assisted by MM. Badoche, Chibret and Grandvaux, obtained at three different points a considerable number of flint implements, which, if found in any Quaternary deposit, would have been accepted without hesitation as of human origin. They comprise small and rude specimens of the types found in the lowest Quaternary gravels, such as celts, knives, and scrapers, and present all the characters by which artificial are distinguished from natural flints in those formations, viz: bulbs of percussion, and chippings in a determinate direction on the sides and points intended for use; while no such chippings appear on other parts of the flint, as must have been the case if they had been the result of casual blows on natural flints.

M. Quatrefages, by whom the subject is fully discussed, and the objects figured in his recent work, lays great stress on the fact that while the beds contain five different sorts of flints, those which present traces of design are confined exclusively to one description of flint, which is most easily manufactured, and best adapted for human use. He observes with much force that a torrent capable of tearing flints from their bed and rolling them on, with collisions violent enough to imitate artificial chipping, could not have exercised a selection, and confined its operations to one only, out of five different descriptions of flints. He shows also that the worked edges exhibit, when closely examined, both intentional chipping and fine parallel striæ, as from repeated use in cutting or scraping, while nothing of the sort is to be seen on the sides left in the natural state, though they are often as sharp, or even sharper.

It only remains to add that these specimens were submitted by M. Rames to two Congresses of French geologists, the first at Blois, when doubts were expressed in some quarters; the second one, last year, at Grenoble, when the Congress decided that the existence of Tertiary man was in this case fully established.

Italy supplies the next instance, and it is a very remarkable one, for here competent geologists have found, not merely implements or cut bones showing human design, but man himself, including skeletons of several individuals. The discovery was made on the flank of the hill of Castenedolo, near Brescia, in a bed which is identified by its fossils as belonging to the Lower Pliocene. The excavations were made with the utmost care, in undisturbed strata, by M. Ragazzoni, a scientific man of good reputation, assisted by M. Germani, and the results confirmed by M. Sergi, a well-known geologist, who visited the spot and inquired minutely

into all the circumstances. According to their united statement some human bones were found in this deposit by M. Ragazzoni as far back as 1860. This led to further excavations, made at different times, and with all the precautions pointed out by experience. The deposit was removed in successive horizontal layers, and nowhere was the least trace found of the beds having been mixed or disturbed. At a considerable depth in it, were found the bones of four individuals, a man, a woman, and two children, which presented the same appearance of fossilization as the bones of extinct animals found in the same deposit. The female skeleton was almost entire, and the fragments of the skull were sufficiently perfect to admit of their being pieced together so as to show almost its whole form.

This preservation of the entire skeleton might lead to the conjecture that it had come there as the result of a subsequent burial, but this supposition is negatived by the undisturbed nature of the beds, and by the fact that the other bones were found scattered in the same stratum, at considerable distances from the perfect skeleton. M. Quatrefages sums up the evidence by saying, "that there exists no serious reason for doubting the discovery of M. Ragazzoni, and that if made in a Quaternary deposit, no one would have thought of contesting its accuracy. Nothing, therefore, can be opposed to it but theoretical *à priori* objections, similar to those which so long repelled the existence of Quaternary man; objections which have long since been refuted, and shown to be absolutely inconsistent with a multitude of established facts."

If we accept this conclusion this remarkable consequence follows: that man, so far back as the Early Pliocene period, was perfectly human, for the skull and bones present no marked peculiarity, or approximation to an animal type. The skull is of fair capacity, and very much what might be expected of a female of the Canstadt race. But if this be so, it necessarily puts back the origin of the human species to a vastly more remote antiquity, which can hardly be less than that of the Early or Middle Miocene, in which the remains of the great anthropoid *Dryopithecus* have been found.

A skull very similar to the above has also been found in Italy, in a lacustrine deposit at Olmo, near Arezzo, on the flank of the Apennines; but although it was found at a depth of nearly fifty feet from the surface, and some feet lower than a layer of clay containing a tooth of the *Elephas Meridionalis*, a species which in Northern Europe scarcely survived the Pliocene period, the whole formation is considered, from other remains found in it, as probably belonging to an early Quaternary age, and therefore not affording satisfactory evidence of Tertiary man. It can only be quoted as affording some corroboration of the discoveries of Capellini and Ragazzoni, by showing that man has existed in Italy for an immense period, and is found in deposits between which and the Pliocene there is no abrupt line of demarcation.

This completes the evidence from the Old World. Turning to the New World, we find, both in North and South America, numerous proofs of the existence of man from a very remote antiquity, but there is some difficulty in arriving at definite conclusions as to their Tertiary date, from the fact that the succession of geological periods does not exactly correspond on the two sides of the Atlantic. America has been said to be, in some respects, a whole period behind Europe and Asia in this succession. Thus the mastodon, which in the Old World is a characteristic Miocene and Pliocene species, and did not survive into the Quarternary, is found in America in the latest drifts, and even in peat masses associated with neolithic flint arrows, and not impossibly 'survived into the Historical period. The bear family, on the other hand, which is so conspicuous in the old formations of Europe, is not found in America until the Quaternary. The extinct fauna also of South America is, like the present, that of a distinct zoological province from either North America or Europe, so that we cannot assume that the Zenglodon and other huge ancestral types of armadillos and ant-eaters, were necessarily of an age corresponding to our Tertiary.

With this reservation I proceed to state some of the leading instances which have been referred to by American geologists as establishing the existence of Tertiary man on that continent.

The most important case is that of the skulls and stone implements which have been found in the auriferous gravels of California, the evidence for which, and for other ancient remains in North America, has been very carefully summed up by the distinguished naturalist, Mr. Alfred Wallace, in an article in the *Nineteenth Century* of November, 1887. These gravels are the result of an enormous denudation of the Sierra Nevada, which has filled up all the great valleys on its Pacific slope with thick deposits of *débris*, forming in some cases detached hills, and even mountains, of considerable height. While this was going on, there were repeated volcanic eruptions in the higher range, giving rise to beds of lava, tuff, and ashes, which are frequently interstratified with the gravels; and finally, the close of the volcanic period was marked by a great flow of basaltic lava, which spread in a nearly level capping over the whole surface of the country. This, and the subjacent beds of gravel and tuffs, has since been cut down by the action of the present rivers, to a depth of sometimes 1500 or of 2000 feet, leaving a series of isolated, tabular hills composed, on the upper part, of a horizontal layer of basalt, varying from 50 to 200 feet in thickness, and in the lower part, of 800 to 1500 feet of gravels, lava-beds, and tuffs. Thus what was once a single lava stream, or succession of lava streams, is now a series of detached hills, the tops of which form parts of one gently inclined plane, sloping from the mountains towards the plains, and now, in some cases, 1000 feet or more above the adjacent valleys.

The present rivers have in some places cut down the lavas and gravels

to the beds of ancient rivers, which flowed in different courses from the existing ones, and it is in the beds of these ancient rivers that the principal accumulations of gold are found. Hence an enormous amount of the oldest gravels has been excavated in working for gold, and in some of these workings human remains have been found, associated with animal remains, which are all of extinct species, entirely distinct from those that now inhabit any part of the North American continent. Some of the genera, such as *Hipparion*, *Auchenia*, and *Elotherium*, would, if found elsewhere, undoubtedly be taken to denote a Pliocene, if not a Miocene formation. The vegetable remains also indicate a totally different flora from that now prevailing in California, and which Professors Lesquereux and Whitney—the latter the geologist of the State, and well-known from his *Report on the Auriferous Gravels of the Sierra Nevada*—consider to be of Pliocene age, with some affinities to Miocene. Numerous stone implements have been found associated with this extinct fauna and flora in nine different countries, and human bones in five widely-separated localities. The two most remarkable instances of the latter are—

1. The Tuolumne skull. A fragment brought up from a shaft in Table Mountain, at a depth of 180 feet below the surface, beneath a bed of three feet of consolidated volcanic tuff, with fossil leaves and branches, over which is a deposit of 70 feet of clay and gravel.

2. The Calaveras skull. This was found in 1866, under four beds of lava, and in the fourth bed of gravel from the surface, embedded in a rounded mass of earthy and stony matter containing bones. The cemented gravel was removed with great difficulty, and disclosed a human skull, nearly entire, with several bones of the human foot and other parts wedged into the cavity of the skull, the whole being in a fossilized condition, like that of the animal bones in similar formations. Human bones have been found in two other instances—one by an educated observer, under a bed eight feet thick of lava; and more recently a discovery has been announced of rude stone implements in Tertiary gravels of Stone Creek, Colorado, associated with shells which are considered by conchologists to be no later than of the older Pliocene.

The Calaveras case is, however, the typical one, owing to its having been extracted from the matrix by Professor Wyman, and all the circumstances of the find thoroughly investigated by Professor Whitney. When the discovery was first announced, it was objected that the skull was possibly taken by the miners from some Indian grave. But this objection disappears before the fact that it was fossilized, and embedded in a matrix which no forger could have counterfeited, and even more conclusively from the great number of instances in which human bones and implements have been discovered at different localities in similar formations. Even the polemical imagination of the Duke of Argyll could hardly invent a conspiracy of so many groups of Californian miners, at different times, and in different localities, to hoax scientists, or to supply proofs

for or against the Darwinian theory of the Descent of Man. Nor would men intent on such a fraud have buried fragments instead of whole skulls, and stone implements of a type different from that which, if they had known enough on these subjects to conceive the fraud, they must have been aware would have been expected. For the nature of these implements is an exception to the general rule, that the oldest type found throughout the world, from South Africa to China, is everywhere the same, consisting of rudely-chipped celts, knives, and scrapers, the Californian implements consisting of stone plates or mortars, and pestles or pounding stones, very like those used by some living tribes of Indians for crushing acorns.

Quatrefages, assuming that these implements were used for pounding corn, justly considers it highly improbable that agriculture could have been known at such an early period, and that Pliocene man in California could have been so far in advance of his Quaternary brother on the Atlantic side of the continent, as shown by the rude celts, and knives of the Trenton gravels. But if they were used for crushing acorns, the argument is not so clear, for a tribe of primitive savages, living among oak forests, might use flat stones and pounders for the purpose, while hunting tribes might use rude celts, as the bushmen do at the present day. Either form seems equally within the range of the early dawn of human intelligence, and not much in advance of that of the gorilla or chimpanzee.

Equally futile is Sir J. Dawson's surmise that the skull may have been dropped into some old mining shaft. There is no evidence for any prehistoric mining for gold in California, such as is found in the copper region of Lake Superior, and it is certain that, if any such had existed, it must have been confined to the superficial deposits. Nothing but an intrepid determination to ignore facts could have led to such a supposition. The Calaveras skull is not a solitary instance, but one of several human bones, and hundreds of human implements, which have been found, at wide distances apart, in these auriferous gravels, and often underneath beds of dense basalt, which could by no possibility have been pierced without the aid of metal tools and blasting powder. Objections like these prove nothing except that the objector is in the theologico-scientific frame of mind, which sees everything relating to the origin of man through the medium of the first chapter of Genesis.

The only serious objection to assuming these Californian discoveries to be a conclusive proof of the existence of Tertiary man, arises from the fact that several good American geologists dispute Professor Whitney's conclusion that these auriferous gravels are of Tertiary origin. They consider that such an enormous accumulation could only have been formed during a Glacial period, when frost and ice were grinding down the mountains, and swollen rivers, from melting snow and glaciers, sweeping the *débris* down the valleys into the plains. This leaves doubt as to their origin in the comparatively mild and equable climate of the Pliocene

period, but as regards the question of the great antiquity of man, it does not much signify to which period we assign them. Any time subtracted from the Pliocene has to be added to the Quaternary, for the fact remains unquestioned that, since man existed in California, valleys have been filled up by drifts from the waste of mountains to a depth in some cases of 1500 feet; these covered by a succession of tuffs, ashes, and lava streams, from volcanoes long since extinct, and finally cut down by the present rivers through beds of solid basalt, and through this accumulation of lavas and gravels. Such an operation corresponds in time with that by which the great river systems of the Old World were sculptured out from a table-land, standing, in some cases many hundred feet higher than at present, as shown by the deposit of the loess, which is universally recognized to be an accumulation of fine glacial mud.

The latest contribution towards the antiquity of human remains in California is contained in a paper read to the Anthropological Society by Mr. Skertchley, the well-known geologist, to whom we are indebted for the discovery of palæolithic implements beneath the chalky boulder-clay at Thetford, in Norfolk.

During a visit to the Spring Valley gold-mine, in one of the tributary valleys of the Sacramento River, he ascertained the following facts: This mine is worked by hydraulic jets directed on the sands and gravels of an old river which once flowed in an impetuous course down a steep gradient from the Sierra Nevada. It has long since ceased to flow, and the bed of the old river is now buried under 500 feet of its own deposits, capped in places by 100 feet of basalt, which has flowed in wide sheets from long-since extinct volcanoes. The section given by Mr. Skertchley is—

1. Basalt cap	25 to 100 feet.
2. White sands and gravels	450 "
3. Blue gravel, with boulders	2 to 15 "
4. Blue gravel, with large boulders	50 "
5. Bed rock—metamorphoid cretaceous slates.		

Stone mortars, rudely chipped, occur abundantly in the white sand (No. 2), about 300 having been found, and one is said to have occurred in No. 3. There can be no question of their occurring *in situ*, as they are washed out of the gravel by powerful hydraulic jets, from the working face of the mine, which forms an artificial cliff of 400 to 600 feet in height.

Nor can there be any doubt as to their human origin, for the specimen produced by Mr. Skertchley to the Anthropological Society was universally admitted to have been artificially wrought. Their use was probably for pounding acorns, which then afforded a great part of the food of the savages who inhabited the district, as they did recently of the Digger Indians.

The question, therefore, is entirely one of the age of the gravels, as to

which American geologists differ, some assigning the upper, or white gravels, to the Pliocene, others to the early Quaternary period. As Mr. Skertchley says, "If the human remains had not been found in them, geologists would never have doubted their Tertiary age. At any rate they must be of immense antiquity. Since they were deposited, the present river system of the Sacramento, Joaquin, and other large rivers has been established; cañons 2000 feet deep have been excavated by these later rivers through lava, gravels, and into the bed rock; and the gravels, once the bed of a large river, now cap hills 6000 feet high."

The definite information, conveyed by an experienced geologist like Mr. Skertchley, gives confirmation and precision to what has been stated from a variety of other sources, as to the frequent discovery of human implements, and even, in a few instances, of human skulls, from similar auriferous gravels over a wide range of country in California. Whether Tertiary or not, it is evident that they must carry back the date of man's existence, in the north-west of America, to a period vastly older than that of 25,000 or 30,000 years assigned to him by the latest guess of Professor Prestwich.

The other instances from America are open to the same doubt as to their geological age. The cavern of Semidouro, in the plateau of Lagoa-Santo, in Brazil, has yielded sixteen human skulls, associated with bones of extinct species, such as *Glyptodon*, *Machærodus*, *Hydrochærus*, *Scalidotherium*, and others, which, if found in Europe, would undoubtedly be taken to imply a Tertiary fauna. But there remains the doubt as to the real succession of geological periods in America, and if the *Mastodon* lived on there until recent times, for which there is a good deal of evidence, there is no conclusive reason why the *Machærodus* and other Tertiary forms might not have survived from the Pliocene or Miocene into the Quaternary. The human implements also found in these Brazilian caves seem, in many cases, of too advanced a type to be readily accepted as of such extreme antiquity.

The same doubt also applies to the numerous human remains found by two competent observers, M. Ameghino and M. Burmeister, at different points in the pampas of Buenos Ayres. They both recognize two distinct beds in this pampean formation—an upper one, in which these remains have been found, and a lower one, in which nothing of human origin has yet been discovered. Ameghino, relying on the fossil remains of distinct animals, considers the upper bed to be Tertiary; while Burmeister considers the lower one only to be Pre-Glacial, and the upper one to be Quaternary. While these doubts continue, we must hold our judgment in suspense as to the evidence from America, though undoubtedly it tends as far as it goes to confirm the rapidly accumulating evidence from the Old World of the existence of Tertiary man; and the discovery of its traces at so many widely-separated places, at such a remote antiquity, adds to the irresistible force of the conclusion that his first origin, and

subsequent diffusion by migration, must be sought in one of the geological formations preceding the Quaternary.

To sum up the evidence, there are at least ten instances of the alleged discovery of human remains in Tertiary strata, of each of which it may be safely said that if the remains had been those of any other Mammalian species, no doubt would have been entertained of their Tertiary origin by any geologist. Four of these are in France, those of St. Prest and of Puy-Courny in the Pliocene, and of Thenay and Pouancé in the Miocene; three in Italy, in the Pliocene of Monte Aperto, St. Olmo, and Castelnedolo; one in Portugal, in the Miocene of the Tagus; in North America, the skull of Calaveras and other numerous human remains in the presumably Pliocene auriferous gravels of California; and in South America, in the pampean remains of Buenos Ayres. Of these, the discoveries at Puy-Courny, Monte Aperto, St. Olmo, and Castelnedolo seem to be undoubted, both as regards the human nature of the remains, and the Tertiary character of the deposits. Those of St. Prest and of the Californian gravels are doubtful only as regards the question whether the deposits may not be of the earliest Glacial or Quaternary period, rather than Tertiary, the evidence from the associated fossil remains being strongly in favor of their Tertiary origin. There remain three cases of alleged discoveries in the Miocene, viz.: at Thenay, Pouancé, and in Portugal, the evidence for which, especially for the two former, is extremely strong and almost conclusive, while the objections to them are obviously based on a reluctance to admit such an extension of human origins, rather than on scientific evidence.

In none of these cases, as further evidence has accumulated, has it tended to shake the conclusions of the first discoverers as to the human character of the implements and the Miocene age of the formations. On the contrary, the most cautious authorities, such as M. Quatrefages, who held their judgment in suspense when the first implements were produced, have been converted by subsequent discoveries, and expressed their conviction that doubt is no longer possible. And the latest Congress of French geologists has expressed the decided opinion that the existence of Tertiary man is fully proved.

On the whole, we may say with confidence of the problem of Tertiary man that, if not completely solved, it is very near solution, and that there is little doubt what the solution will be.

The next generation will probably accept it as an obvious fact, and wonder at the doubts now entertained, very much as we wonder at the incredulity with which the discovery of palæolithic implements in the Quaternary gravels of the Somme by M. Boucher de Perthes was received by the scientific world, when it was first announced.

CHAPTER VI.

THE MISSING LINK.

OF all the problems which have been raised, but not solved, the most important is that of the origin of man. It is important, not only as a question of the highest scientific interest, but from its bearings on the deepest mysteries of philosophy and religion. Is man, like the rest of the animal creation, a product of evolution acting by natural laws, or is he an exception to the general rule, and the product of some act of secondary supernatural interference? Or to put it in theological language, is man a consequence of that "original impress," which Bishop Temple pronounces to be more in accordance with the idea of an omniscient and omnipotent Creator; to whom "a day is as a thousand years, and a thousand years as a day," than the traditional theory of a Creator constantly interposing to supplement and amend His original creation by miracles? Or is he an exceptional supplement and amendment to such original creation, miraculously introduced at one of its later stages? It is a question which has to be solved by facts, and not by theories or prepossessions.

As regards the physical universe, and the whole of the world of life, with the possible exception of man, it may be taken as already solved in the sense of evolution and original impress. But in the case of man, the question is still *sub judice*; the missing links have not yet been discovered which connect him with primitive forms, and scientific authorities are not yet agreed whether the time which has elapsed since his first appearance on earth is sufficient to afford a possibility of his being a creature of evolution. The problem is of such importance that it may be well to state its conditions in some detail.

When I say that evolution has become the accepted law of the whole animate and inanimate universe, with the possible exception of man, why do I say this? The old theory of special miraculous interpositions to account for all unexplained phenomena was the most natural and the most obvious. It was, in fact, the inevitable result of the first attempts of the human mind to connect effects with causes, or, in other words, to reason. Take the case of thunder. What could the first savage who reasoned on the subject infer except that, the noise being like the roar of an angry wild beast or enemy, and the flash like that of the darting of an arrow or javelin, there was probably a sort of magnified man like himself in the clouds, full of wrath and very capable of doing him an injury?

The savage who reasoned thus, and the early priests and astronomers who, whenever they saw motion in the sun and planets, inferred life, were natural philosophers, who reasoned correctly from their premises, only their premises were wrong. In course of time, it came to be demonstrated that phenomena formerly supposed to be isolated miraculous acts of an Anthropomorphic power, were linked together by that invariable sequence which we call law, and that their real first cause or origin must be pushed vastly further back in space and time, and relegated more and more from the known to the unknown.

The establishment of Newton's law of gravity as the pervading principle of all celestial movements, gave the first great blow to the old miraculous theory, and introduced the conception of Natural Law. Geology did for time what astronomy had done for space, and since the publication of Lyell's *principles* no serious thinker has doubted that the successive stages by which the earth was brought to its present state were due to evolution, acting by natural laws over immense periods of time. The discoveries of modern chemistry have confirmed the impression of the uniformity and invariability of Law, by showing it extending from the infinitely great to the infinitely small, from stars to atoms; while the spectroscope shows the identity of matter and energy throughout this extreme range. Above all, the establishment of the laws of the indestructibility of matter and energy, and their mutual transformation into new forms and new modes of action, have placed special causes altogether out of court, and reduced all the phenomena of the inorganic universe to one law of universal simplicity and generality. Instead of speculating with ancient sages who may be the God who flashes lightnings from the skies, or drives the chariot of the sun; or even as late as Kepler, assigning a spirit to each planet to direct its harmonious movement, the question for modern science is reduced to the ultimate stage of—What mean these atoms and energies into which everything can be resolved? Whence came they, and how did they become endowed with those laws which have enabled them to build up the universe by an irresistible evolution?

But the miraculous theory died hard. Based as it was on popular apprehension and on theological prepossession, when driven from the outwork of the inorganic universe, it held out stoutly in the inner citadel of life. Were not species distinct, and if so how could they have come into existence unless by a series of special acts of miraculous creation? Above all, was not man a miracle, with his high faculties, "only a little lower than the angels;" and did not all records and traditions describe him as a recent creation, who had fallen from a high state of perfection by an act of original sin? Nay more, did not science itself confirm this view, and had not Cuvier laid down the axiom that no human remains had been found in connection with any extinct animals, or in any but the most superficial deposits? The discovery of innumerable human implements and remains in all quarters of the globe, in caves and river drifts

of immense antiquity, and associated with extinct animals, has shattered this theory into fragments, and it is now as impossible to believe in man's recent origin and fall, as it is in the sun's daily journey round the earth, or the notion that it might be as big as the Peloponnesus.

Still, the difficulty as to the creation of distinct species remained, and until the publication of Darwin's celebrated work on the *Origin of Species*, the miraculous theory, though driven back, could hardly be said to be routed. But evolution was in the air and Darwin's book produced the effect of a fragment of crystal dropped into a saturated solution. In an incredibly short time, all the floating elements crystallized about it, and the speculations of science took a definite form, the evidence for which has gone on strengthening and increasing from that day to this, until, as I have said, with the solitary exception of human origins, evolution or original impress has become the axiom of science, and is admitted by every one who has the slightest pretensions to be considered a competent authority.

This predisposition to accept Darwin's views arose from various causes. The establishment of evolution as a fact in the material universe had familiarized men's minds with the idea of Natural Law, and the discoveries of astronomy and geology had proved to demonstration that the accounts of creation, formerly taken to be inspired truths which it was impious to question, could only be considered as vague poetical versions of the ideas which were current among Eastern nations in the infancy of science. The last remnant of respect for these narratives as literal records of actual events vanished when the discoveries of M. Boucher de Perthes were confirmed, and it became apparent that man was not a recent creation who had fallen from a high estate, but the descendant of palæolithic savages, who had struggled slowly up to civilization through immense periods of time. As a knowledge of natural history increased, it became apparent that the earth had not been peopled recently from a single centre, but that it was divided into numerous vegetable and zoological provinces, each with its own separate flora and fauna; and a better acquaintance with the zoological record showed that this had been the case for millions of years, and through the vast succession of strata of which the earth's crust is composed. Finally, the multiplication of species, both now existing and in past geological ages, reached a point which, on any theory of separate supernatural creations, required an amount of miracle which was plainly absurd and impossible. When it came to this, that 160 separate miracles were required to account for the 160 species of land shells found to exist in the one small island of Maderia, and that 1400 distinct species of a single shell, the *Cerithium*, had been described by conchologists, the miraculous theory had evidently broken down under its own weight and ceased to be credible.

In this state of things, Darwin not only supplied a vast number of instances, drawn from his own observation, of graduation of species into

one another, and the wide range of varieties produced and rendered permanent by artificial selections, but what was more important, he showed the existence of a *vera causa* operating in nature, which could not fail to produce similar effects. If a pigeon-fancier could, by pairing birds which showed a tendency to variation in a particular direction, produce in a few generations races as distinct from the original blue-rock as the fan-tail or the pouter, it is evident that nature could do the same in a longer period. Nay, not only that nature *could*, but that nature *must*, do this, for in the struggle for existence, variations, however slight, which gave an advantage to individuals, must tend to survive, and become extended and fixed by the operation of heredity. This was the famous theory of "Natural Selection" and "Survival of the Fittest," which at once converted the chaos of life into a cosmos, and extended the domain of harmonious law to the organic as well as the inorganic universe. Attractive, however, as the theory was from the first to thinking men, its universal acceptance at the present day is due mainly to the immense amount of confirmation which it has since received. This confirmation has come from two independent sources—the discovery of Missing Links and Embryology.

When Darwin's theory was first propounded, the objection was raised that if species were not created distinct, but gradually evolved from one another by slight variations, geology ought to show us the intermediate forms which must have existed before the permanent types were established. The objection was reasonable, and Darwin was the first to admit it, but he pleaded the imperfection of the geological record, and predicted that with fuller knowledge of it, the gaps would be filled up and the missing links discovered. The truth or falsehood of his theory was thus staked on the discovery of missing links. The case was almost similar to that of the truth of Halley's calculations as to the orbit of his comet, being staked on its return at the predicted period. The comet did return, and the missing links have been discovered, or so many of them that no doubt remains in the minds of scientific men that evolution has been the real law of the animal and vegetable kingdoms.

In fact, the discovery of missing links has gone so far, that Professor Cope, one of the latest and highest authorities on the subject, and who has done so much for it by his discoveries of the wonderfully rich fossil fauna of the Tertiary formations of the Rocky Mountains and California, says—"We have attained the long-since extinct ancestor of the lowest vertebrates. We have the ancestor of all the reptiles, of the birds, and of the mammals. If we consider the mammals separately, we have traced up a great many lines to their points of departure from very primitive types. Thus we have obtained the genealogical-trees of the deer, the camel, the musk, the horse, tapir, and the rhinoceros; of the cats and dogs, of the lemurs and monkeys, and have important evidence as to the origin of man."

M. Gaudry, the celebrated discoverer of the fossil treasures of the Upper Miocene of Pikermi, repeats the same thing. He says—"If we take a skeleton of a fossil mammalian species, and compare it with one of an analogous living species"—as for instance a Mammoth or Mastodon with a modern elephant—"placing the heads, vertebræ, humerus, radius, femurs, feet, &c., of the one, side by side with those of the other, the sum of the likenesses will appear so much greater than that of the differences, that the idea of family relationship will impose itself on the mind. In vain would sceptics try to throw doubts on this relationship by pointing out some slight shades of difference. We see too many points of resemblance to admit that they can be all fallacious." And again he says, "Where our predecessors saw ten or one hundred distinct beings, we see only one; and instead of creations thrown, as it were, into the world at haphazard, without law and without connection, we follow the trace of a few types whose essential characters are so similar as to enable us to comprehend them in still simpler types, and thus hope to arrive some day at understanding the plan which God has followed in producing and developing life in the world."

This is almost identical with Bishop Temple's profession of faith "that it seems something more majestic, more befitting of Him to whom a thousand years are as one day, thus to impress His will once for all on His creation, and provide for all its countless varieties by this one original impress, than by special acts of creation to be perpetually modifying what He had previously made."

A clear popular conception of this question of "missing links" is so important for all who desire to understand the latest conclusions of modern science, that it may be well to illustrate it by a homely example. Fifty years ago, the popular belief respecting the animal creation was summed up in the simple words of Dr. Watts' hymn:

"Let dogs delight to bark and bite,
For 'tis their nature to;
And bears and lions growl and fight,
For God has made them so."

Science could only shrug its shoulders and say, "So it seems; I have no better explanation to give."

How different are the terms in which science would now reply. "Made, if you like, but how made? As *individuals*, each from a cell not distinguishable from any other microscopic cell of the lowest animal and vegetable organisms, but endowed with such an impress of evolution that it develops through the stages of fish, reptile, and mammal, into the special mammalian form of its parents. As *species*, traceable through a similar progression backwards from the living form, through intermediate ancestral forms graduating by slight distinctions into one another, up to the generalized Eocene type of the Placental mammal, and thence back-

wards by less definite but still traceable variations, to the types of the marsupial, the reptilian, the fish, the vertebrate, and so up to the primitive cell in which the individual living animal originated."

Thus the dog and bear, now so distinct, can be traced up to *Amphicyon* and *Hyænarctus*, which combined the qualities of both; the former being rather more dog than bear, the latter rather more bear than dog; and these again, either through the *Creodonta* to the *Bunodonta* of the early Eocene, or through the *Ictitherium* to the *Cynodictis*, or weasel-like dog of the same formation, which is clearly a descendant of the insectivorous Marsupials of the Secondary age.

The horse affords the best example of this progressive evolution, the specialization from the generalized Eocene type of a five-toed and tubercular toothed mammal being clearly traced, step by step, down to the present one-toed horse. The evolution took the course of adapting the original form to the requirements of an animal which had to live on wide prairies or desert plains, where a bulky body had to be transported at high speed, by leaps and bounds, over great distances, both to find food and to escape from enemies by flight. For this purpose, evidently, one solid toe, protected by a single enlarged nail or hoof, was preferable to five or three weak toes terminating each in a separate nail or claw; and in like manner, teeth adapted for cutting and masticating grass were better than the more millstone-like tubercular teeth adapted for grinding down shrubs and branches of trees. Accordingly, we find the evolution of the horse constantly following this line. In Europe, the *Hipparion*, who is the immediate ancestor of the horse whom it closely resembles, has already the two lateral toes so rudimental as to have become wholly useless; in the *Anchitherium* the tips of the outer toes just touch the ground, while the *Palæotherium* is a distinctly three-toed animal, though the middle toe is larger than the two side toes. We have thus a complete progression from a slow, heavy animal, adapted for living on marshy ground, like the tapir, to the courser of the plains, whose latest development, under artificial selection, is seen in an *Ormonde* or a *Donovan*.

In America the links in the pedigree of the fossil horse are still more numerous, and the transitions closer. The line begins in the Early Eocene with the *Eohippus*, an animal of the size of a fox, which in addition to four well-developed toes of the forefoot, had the remnants of the hoofed fifth toe. In the Upper Eocene, the *Eohippus* was replaced by the *Orohippus*, in which the rudimentary first digit had disappeared, and the fifth was reduced to a splint. In the Lower Miocene the *Meshippus*, which was about as large as a sheep, had only three toes with a rudimentary splint on the foreleg, and in its teeth and other particulars approached more closely to the horse. In the Upper Miocene, *Meshippus* is replaced by *Miohippus*, which approaches closely to the *Anchitherium* of Europe; while in the Lower Pliocene this gives way to the *Protohippus*, which approached the horse very closely, and was about the size of

an ass. Like the Hipparion of Europe, which in many respects resembles, it had three toes, of which only the middle one reached the ground. In the Middle Pliocene we have the Pliohippus, which has lost the small hooflets on the rudimentary toes, and is in all respects very like a horse; and finally in the Upper Pliocene we have the true horse. This progression gives rise to two important remarks. First, that size cannot be accepted as of much importance in tracing lines of descent, as might indeed have been anticipated from the wide variations in the size of dogs and other domestic animals introduced by artificial selection. Secondly, that the extinction of wide-spread and apparently unexhausted races of animals is a fact which has to be reckoned with. The total disappearance of the horse in America, where it and its ancestors had existed in such numbers from the Early Eocene down to quite recent times, is a most perplexing problem. There is no appearance of any great change of environment since the horse roamed in countless numbers over the continent of America, and we know from the experience of Europe that it was a hardy animal, capable of resisting both the torrid heat of Arabia, and the intense cold of the Glacial period. And so many other species survived in America, from the Pliocene to the Quaternary and recent periods, as to show that the extinction of the horse was an isolated phenomenon. And as of extinction, so of creation. We do not fully understand the exact process by which types and species have either appeared or disappeared, and this affords the only ground left to those who, from theological or other prepossessions, are hostile to Darwinism. They say his theory of natural selection from spontaneous variations does not account for everything, and does not explain fully all the laws of these variations. This may be partly true, but it in no way affects the truth of evolution, which is a *fact* and not a *theory*, and is quite independent of the subsidiary question, whether natural selection can account for all, or only for a principal part of the facts which, in some way or other, have to be accounted for. Thus, whether the long neck of the giraffe was developed by natural selection taking advantage of accidental variations in this direction, or partly by this and partly by heredity fixing variations induced by use and disuse of organs in stretching to reach the branches of palms, in no way affects the question whether the animal is a product of evolution or a miraculous creation.

To return to the pedigree of the horse, which may be taken as the typical instance of descent traced by progressive specialization. What is a horse? It is essentially an animal specialized for a particular object, that of the rapid progression of a bulky body over open plains or deserts. When mammalian life first appears abundantly in the lower Tertiaries, it is in the primitive generalized type, in which nature seems always to make its first essays, as if it were trying its 'prentice hand on a simple sketch, to be gradually developed into a series of finished pictures. The primitive sketch in this instance took the form of what Professor Cope calls a

"pentadactyle, plantigrade, bunodont," by which formidable collocation of words we are to understand an animal which had five toes at the extremities of each of its limbs ; which walked on the flat of its feet, and whose molar teeth presented a flat surface, with four, or in the very earliest form, three little cones or tubercles, to assist in grinding its food. It may give some idea of the precision and certainty to which such researches have attained, to say that this primitive form was predicted by Professor Cope in 1874, from the progress towards it traced in following backwards various lines of later descent; and that seven years later, in 1881, the prophecy was fulfilled by the discovery that such a type of mammals, now known as the *Condylarthra*, actually existed in large numbers in North America, in the early Eocene period.

Consider now what the specialization from this original type to the horse implied. The first step was to walking on the toes instead of on the flat of the foot, a change which, whether owing or not to the lady *Condylartha* having adopted the modern fashion of wearing high-heeled boots, became general in most lines of their descendants. For galloping on hard ground it is evident that one strong and long toe, protected by a solid hoof, was more serviceable than four short and weak toes, protected by separate nails. Accordingly, coalescence of the toes is the fundamental fact in the progress of structural changes through successive species, by which the primitive Bunodont was converted into the modern horse. Corresponding with this are other progressive changes in the articulation of the joints, especially those of the bones corresponding to the ankle and wrist joints, which are modified from a contact of plane surfaces into a system of tongues and grooves, which give freedom of action in direct progression, but secure them against the dislocations from shocks and strains, to which they would be exposed in galloping or jumping. So in other types the specialization takes different forms, but always towards the sharper distinction of species formerly more united and generalized. Thus the half-bear, half-dog, and half-cat original type of the Eocene, becomes differentiated into the three distinct types of the wholly bear, dog, and cat of later formations.

Nor is this tracing back of existing mammalian species to ancestral forms in the Early Tertiary all that recent science has accomplished. The course of geological discovery for the last twenty, and specially for the last ten years, may almost be summed up as that of the discovery of "missing links," until gap after gap, which seemed to separate not only species, but genera and orders, by insurmountable barriers, has been bridged over by intermediate forms. Thus to take one of the most striking instances—What can, at first sight, appear more unlike than reptile and bird, and who would have ventured to predict that any relationship could be traced between a tortoise and a swallow? And yet nothing is more certain than that the Reptilia pass over into the Aves, by successive gradations, which make it difficult to pronounce where one ends and the

other begins. The pterodactyle, or flying dragon of the lias, approaches in structure and habits towards the bird type; the ostrich retains some resemblance to the pterodactyle, but the complete transitional type, or "missing link," has been found in those feathered reptiles, or birds with reptilian heads and teeth, whose remains have fortunately been preserved in a fossil state. The Archæopteryx, from the Ceningen slate of the Upper Oolite, in the museum of South Kensington, is a beautiful specimen of such a missing link, and would certainly be taken for a bird by any casual observer, though comparative anatomists find many of its essential features to be reptilian.

The Archæopteryx and other transitional types which have been discovered in Europe and America between birds and reptiles, afford perhaps the most obvious and universally intelligible instances of what recent geology has done in the way of the discovery of "missing links," between genera and orders now widely separated; but similar discoveries have gone a long way towards establishing the continuity of life from the earliest periods in which it appears, down to the present day, and showing the kind and progress of the changes in structure, which, in the course of evolution, have linked the various orders and species of living forms together. Thus the higher form of Placental mammals which became predominant in the Early Tertiary, differs from the Marsupials, which extend into the trias of the Secondary period, by the greater extension of the allantoid or membrane which surrounds the fœtus. In the Placentals this completely surrounds it, so that the fœtus remains part of the mother until birth; while in the Marsupial the young are born incomplete, and take refuge for a time in a pouch which is attached to the mother's stomach. But there are fossil animals in the Eocene which combine the two characters, showing a Marsupial brain and dentition, with a Placental development. They are, in effect, Marsupials in which the allantoid, instead of being arrested at an early stage, has continued to grow.

Again, the Marsupials are linked on to still lower forms of animal life through the Monotremata, of which a few specimens survive in Australia, typified by the Ornithorynchus, or water-mole, which has the bill of a duck, and lays eggs. This order has only one opening, called the cloaca, for the purposes which, in higher orders, are performed by separate organs, and it is remarkable that this stage is passed through by man and the higher mammals in the course of their embryonic development.

Going still further back, the lines of demarcation between orders are, as in the case of birds and reptiles, more and more broken down every day by the discovery of intermediate forms, and we can almost trace the evolution from the Ascidian or lowest vertebrate type into the fish, the amphibia, the reptile, and so upwards. And it is remarkable that this course of evolution invariably corresponds with the general progressive evolution of types through geological ages, and with the embryonic evolution of individual life from the primitive cell. It is not too much,

therefore, to assume evolution to be the demonstrated law of the world of life as well as of that of matter, and to confine ourselves to the question whether man is or is not a solitary exception to this law.

We are now in a position to examine more closely the bearings of this question of missing "links" on that of human origins. Geologically speaking, man is one of the order of Primates, which includes also the catarrhine apes and monkeys of the Old World, the platyrrhine apes and monkeys of America, and the lemurs or half-monkeys which are found principally in Madagascar and a few districts of continental and insular Asia and Africa. Of these, the anthropoid apes—the chimpanzee, gorilla, and orang approach most closely to man in their structure.

In fact, considered as mere machines, the resemblance between them and man is something wonderful. It is much closer than is suggested by a mere comparison of outward forms. One must have read the results arrived at by the most distinguished comparative anatomists, to understand how close is the identity. Not merely does every bone, every muscle, and every nerve in the one, find its analogue more or less developed in the other, but even in such minute particulars as the direction of the hairs on the forearm converging towards the elbow, there is an absolute correspondence.

It is in the brain, however, which is the most important organ, as being that on which the specially human faculty of intelligence depends, that the close physical resemblance between man and the other quadrumanous is most striking. The brain of all quadrumanous animals is distinguished from that of quadrupeds by certain well-defined characters. Those of lemurs, monkeys, baboons, and apes, show a progression of these characters from the lemurs, whose brain differs little from that of rodents, up to the anthropoid apes, the chimpanzee, the gorilla, and the orang, who have a brain which in its most essential particulars closely resembles that of man. In fact, the brain of these apes bridges over much more than half the interval between the simplest quadrumanous form of the lemur and the most advanced—that of man; while in like manner the brains of some of the inferior races of mankind, and of idiots, where the development of the brain has been arrested, bridge over the interval between man and ape, and in some extreme cases approach more nearly to the latter than to the former type both in size and structure.

Attempt after attempt has been made to find some fundamental characters in the human brain on which to base a generic distinction between man and the brute creation, but such attempts have invariably broken down under a close investigation. Thus, in the celebrated controversy between Owen and Huxley, the former distinguished anatomist thought that he had found such a distinction in the hinder part of the human brain, but it turned out that he had been misled by relying on the plates in the work of the Dutch anatomists Camper and Vrolik; and Huxley,

confirmed by them, proved by actual dissection that all the characters on which Owen relied were to be found equally in the brain of the chimpanzee and other higher quadrumana.

The distinction also on which the very term quadrumana is founded is proved to be fallacious, for Huxley has shown that the termination of the hinder limbs of the anthropoids is really a foot with a prehensile great toe, and not a hand, and there are many instances, both of human individuals and races, in which this toe has considerable flexibility, and is used in climbing trees or picking up small objects. And so in innumerable other cases in which anatomical observations, supposed to be specifically human, have either been found wanting in some individual men, and present in some individual quadrumana, or have been traced in both in some undeveloped or fetal condition.

And yet with this close identity of anatomical conditions there is, as Huxley emphatically asserts, a wide gap between man and the highest ape, which has never been bridged over, and which precludes the idea of direct lineal descent from one to the other, though it implies close relationship. The differences are partly physical and partly intellectual. Of the former, it may be said that they may be all summed up in the fact that man is specialized for erect posture.

Speaking broadly, it may be said that man is a member of the order of Primates, specialized for erect posture; while monkeys are specialized for climbing trees, and anthropoid apes are a sort of intermediate link, specialized mainly for forest life, but with a certain amount of capability for walking erect and on the ground.

Thus, to begin at the foundation of the human structure, the foot, with its solid heel bone, arch of the instep, and short toes, is obviously better adapted for walking and worse for climbing than that of monkeys. The upright basis of the foot corresponds with longer, stronger, and straighter bones of the leg, and a greater development of muscles to move them. The erect posture determines the shape of the pelvis and haunch bones, which have to support the weight of the vertebral column and intestines in a vertical direction. The vertebral column, again, is arranged with a slight double curvature, so as to enable the body to maintain an upright posture, and to afford a vertical support for the head. And finally, the larger brain is rendered possible by its weight being nicely balanced on a vertical column, instead of hanging down and being supported by powerful muscles requiring strong processes for lateral attachment in the vertebræ of the neck.

Again, the fore-limbs being entirely relieved from the necessity of being used as supports, acquire the marvellous flexibility and adaptability of the human arm and hand; a specialization which has doubtless a good deal to do with man's superior intelligence, for as we see in the case of the elephant, the intelligence of an animal depends not merely on the mass of the brain, but very much on the nature of the organs by which it

is placed in relation with the surrounding environment. In this respect there is no animal organ comparable to the human hand, and we may probably trace its influence in other divergencies of the human from the bestial type. Thus, the greater development of the jaws and bones of the face in animals, giving rise to a projecting muzzle, is no longer requisite when the arm and hand afford so much better an instrument than the mouth for seizing objects, and for attack or defence; while from the same cause the canine teeth tend to diminish. In fact, the specialization of improved types from the early generalized type, takes very often the form of a reduction of the number of teeth to that required for the relations of the new types to their environment. Thus, in the pure carnivora, like the cats, the molars disappear and the canines and sectorial premolars assume a great development. In the Herbivora, on the other hand, the molars are developed at the expense of the flesh-cutting teeth; and in civilized man there is a progressive diminution in the size of the jaws, which hardly leaves room for the normal number of teeth, some of which are probably destined to disappear, as the so-called wisdom-teeth have already almost done.

Thus, from the single point of view of specialization for erect posture we arrive at all the physical characteristics which distinguish man from the monkeys and anthropoid apes. At the same time, it is a difference only of adaptation and not of essence. The machine man differs from the machine ape, much as the modern railway locomotive differs from the old-fashioned pumping steam-engine. The essential parts, boiler, pistons, cylinders, valves, are the same, but differently modified; those of the locomotive being vastly better adapted for condensed energy and rapid motion in a smaller compass. Still, no one can doubt their affinity and common origin, or suppose that while the Newcomen engine owed its existence to human invention, the Wild Irishman or Flying Scotchman could only be accounted for by invoking supernatural agency.

This is precisely the case as regards man in his physical aspect. It is difficult to imagine that the combination of bones, muscles, and nerves, which make a man, originated in any different manner than did the combination of the same identical bones, muscles, and nerves, which make a chimpanzee or gorilla. If one originated by evolution, the other must have done so also; and conversely, if one came into being by special miraculous creation, so also must the other, and not only the other, but all the innumerable varieties of distinct species, now, and in past geological times, existing upon earth.

It is only when we come to the higher intellectual and moral faculties, that the wide gulf appears between man and the animal creation, which it is so difficult to bridge over. It is true that all or nearly all of these faculties appear in a rudimentary state in animals, and that not only apes and monkeys, but dogs, elephants, and others of the higher species, show a certain amount of memory, reasoning power, affection, and other human

qualities; while, on the other hand, some of the inferior races of mankind show very little of them. The chimpanzee Sally, in the Zoological Gardens, and Sir John Lubbock's dog Van, can count up to five; while it is said that three is the limit of the counting power of some of the Australian tribes. The gorilla, in his native forests, according to the accounts of travellers, lives respectably with a single wife and family, and is a better husband and parent than many of our upper ten who figure in Divorce Courts. Still, there is this wide distinction, that even in the highest animals these faculties remain rudimentary, and seem incapable of progress, while even in the lowest races of man they have reached a much higher level, and seem capable of almost unlimited development. No human race has yet been discovered which, however savage, is entirely destitute of speech, and of the faculty of tool-making in the widest sense of adapting natural objects and forces to human purposes. As regards speech, no animal has advanced beyond the first rudimentary stage of uttering a few simple sounds, which by their modulations and accent give expression to their emotions. They are in the first stage of what Max Muller calls the "bow-wow and pooh-pooh theory," and even in this they have advanced but a little way. They have a very few root-sounds, and those are all emotional. A dog or ape can express love, hatred, alarm, pain, or pleasure, but has not risen even to the height of coining roots imitating sounds of nature such as "crack " and "splash," and still less to that which all human races have attained to, of multiplying these primitive roots indefinitely, by extending them by some sort of mental analogy, to more abstract ideas; and connecting them by some sort of grammar, by which they are made to express a variety of shades of meaning and modifications of human thought. Animals understand their own simple language perfectly well, and to a certain extent some of the higher orders, such as dogs and monkeys, can be taught to understand human language, but no animal has ever learned to speak in the sense of using a series of articulate sounds to convey meaning, though, as in the case of the parrot, the vocal organ may be there, capable of uttering imitation words and sentences.

As regards tool-making, no human race is known which has not shown some faculty in this direction. The rudest existing tribes, such as Bushmen or Mincopies, chip stones, and are acquainted with fire and with the bow and arrow, spear, or some corresponding weapon for offence and defence. The highest apes have not got beyond the stage of using objects actually provided for them by nature, for definite objects. Thus monkeys enjoy the warmth of a fire and sit over it, but have never got the length of putting on coals or sticks to keep it up, much less of kindling it when extinguished. Sally and Mafuca perfectly understood the use of the keeper's key, and would steal and hide it, and use it to let themselves out of their cage; but no chimpanzee or gorilla has ever been known to fashion any implement, or do more than use the sticks and stones pro-

vided by nature, for throwing at enemies or cracking nuts. Their nearest approach to invention is shown in constructing rude huts or nests from branches and leaves, for shelter and protection ; an art in which both apes and savages are very inferior to most species of birds, to say nothing of insects. The difference is a very fundamental one, for in the case of man, we can trace a constant progression from the rudest form of palæolithic chipped stones, up to the steam-engine and electric telegraph ; but in the ape, we can discern no signs of progress, or of a capacity for progress. It is conceivable that by taking a certain number of Bushmen or Australians when young, placing them in a favorable environment, and breeding selectively for intelligence, as we breed race-horses for speed, or short-horns for fat, we might, in a few generations, produce a race far advanced in culture ; but it is not readily conceivable that we could do the same with oranges or chimpanzees. It would be a most interesting experiment to try how far we could go with them in this direction, but unfortunately it cannot be tried, as we have no sufficient number of specimens to begin with, and the race cannot be kept alive, and much less perpetuated in our climate. Even if it could, there is no reason to expect that it would succeed up to the point of making a race of apes or monkeys who could speak a primitive language or make primitive tools. For the fundamental difference between them and man may be summed up in the words "arrested development."

At an early age the difference between a young chimpanzee and a young negro is not very great. The form and capacity of the skull, the convolutions of the brain, and the intellectual and moral characters are within a measurable distance of one another ; but as age advances, the brain of the negro child continues to grow, and its intelligence to increase up to manhood ; while in the case of the ape the sutures of the skull close, the growth of the brain is arrested, and development takes the direction of bony structure, giving rise to a projecting muzzle, protuberant crests and ridges, and generally a more bestial appearance ; while the character undergoes a corresponding change and becomes less human-like.

It is evident, therefore, that these two branches of the Primates, man and ape, follow diverging lines of development, and can never be transformed into one another, and that the "missing links" to connect the human species with the common law of evolution of the animal kingdom, are to be sought in other directions than that of direct descent from any existing form of ape or monkey.

There are three lines of research which may be followed in looking for traces of such missing links.

1. We may compare the higher with the lower varieties of the existing human species, and see if we can discover any tendency towards a lower form of ancestral development.

2. We may observe the results in the cases of arrested development

which occur in those unfortunate beings who are born idiots or microcephali, that is, with deficient brains.

3. We may explore the records of the past, of which we have now numerous remains preserved in the fossil state.

The first and second of these lines give us a certain amount of clear and positive result. Comparing civilized man with the Negro, Australian, Bushman, and other inferior races, we invariably find differences, which all tend in the direction of the primitive "pentadactyle, plantigrade, bunodont." The brain is of less volume, its convolutions less clearly marked, the bony development of the skull, face, and muzzle more pronounced, the legs shorter and frailer, the arms longer, the stature less. The most primitive savage races known to us are apparently those Pygmies who, like the Akkas and Bushmen of Africa, the Negrillos of Asiatic islands, some of the hill tribes of India, and the Digger Indians of North America, have been driven everywhere into the most inaccessible forests and mountains by the invasion of superior races. The average stature of many of these does not exceed four feet, and in some instances fall as low as three feet six inches; and in structure, as well as in appearance and intelligence, there is no doubt that they approximate towards the type of monkeys.

In the case of idiots, the resemblance to an animal type is carried much further, so far, indeed, that they may be almost described as furnishing one of the missing links. As Vogt says, "we need only place the skulls of the negro, chimpanzee, and idiot side by side, to show that the idiot holds, in every respect, an intermediate place between them."

Thus the average weight of the brain of Europeans is about 49 oz., while that of Negroes is 44 1-4 oz., and in some of the inferior races it is still lower, descending to about 35 oz. in the case of some skulls of bushwomen. This approaches very closely to the limit of 32 oz. which Gratiolet and Broca assign as the lowest weight of brain at which human intelligence begins to be possible, but in many cases of small-headed idiots the weight descends much lower, and has even been observed as low as 10 oz. The average weight of the brain of the large anthropoid apes is estimated at about 20 oz., and in some cases is even higher, so that the brains of some of the inferior human races stand about half-way between those of the superior races and of the anthropoids, which latter again differ more from those of the lemurs and inferior monkeys than they do from those of man.

The approximation towards primitive conditions shown by a comparison of superior with inferior races, and of normally developed men with idiots and apes, might have been expected to derive further confirmation from tracing back the third line of inquiry, that of fossil remains.

And yet it is just here, where we might expect to find conclusive evidence, that it has hitherto failed us. Not only have we found no fossil remains which stand to modern man in something of the same relation as

the Hipparion does to the horse, but nothing has yet been discovered which seems to carry us so far in that direction as is done by a comparison with some of the existing savage races. The number of skulls and skeletons dating back to early Quaternary times, distant from us certainly not less than 50,000 years, and probably much more, is now so great as to enable us to speak confidently as to their character, and even to classify their different types. The oldest is that known as the Canstadt type, the next oldest that of Cro-Magnon. Now the Cro-Magnon type is not only not a degraded one, but, physically speaking, that of a fine race, tall in stature, with large and symmetrical brain-structure, and on the whole on a par with some of the best modern races.

The Canstadt type is somewhat more rude, and in extreme cases, like that of the celebrated Neanderthol skull, so simious in the low forehead and massive bony ridges, that at first sight it was thought that one of the missing links had really been discovered. But further inquiry showed that this was only an extreme instance of a type which is presented by numerous other skulls of a character entirely human, certainly not inferior to that of existing savages, and which may be traced as surviving among many of the best European races. Even in the extreme case of the Neanderthol skull, the brain was of fair capacity, and a modern skull, that of Lykke, a Dane of distinguished intellectual capacity, is preserved in the museum at Copenhagen, which closely resembles it in all its principal peculiarities.

If the Tertiary skulls of Olmo, Castelnedolo, and Calaveras are accepted as genuine, they carry us back much further in the same direction. Everything about these remains is entirely human, and in the female skull of Castelnedolo, M. Quatrefages thinks he can discover a specimen of one of the milder and less savage forms of the Canstadt type.

Reports occasionally reach us of discoveries of alleged missing links, but they lack confirmation. The nearest approach to a scientific fact is afforded by a human jaw found in the Cave of La Naulette, in Belgium, in which Mortillet and other good authorities assert that the genial tubercle is wanting. This is a small bony excrescence on the chin, to which the muscle of the tongue is attached, and is said to be necessary for the movements of the tongue which render speech possible. It is absent in the monkey and all non-speaking animals, and Mortillet asserts that in the Naulette skull the bone is absent, and its place shows a hollow. He argues that the primitive men of the Neanderthol or Canstadt type were incapable of speech, and his conclusion is thought probable by several good authorities. But the induction seems too wide to be drawn from a single instance, and as far as I am aware, it has not been confirmed by any other undoubted specimen of early palæolithic man.

We are still therefore without any conclusive evidence of human evolution from fossils, and the negative evidence remains, that while so many Pliocene and Miocene formations have been explored, and so many miss-

ing links of other animal forms have been discovered, no such links have yet been found in the case of the human species.

What can be said to these facts? Only this, that if the missing links exist, they must be sought much further back. From the wide diffusion of mankind over nearly the whole of the habitable globe in early Quaternary times, it is clear that if the race originated like other animal races from evolution, the origin must be sought in a much more remote antiquity. The existence of the *Dryopithecus* and other anthropoid apes in the Middle Miocene, shows that the development of another branch, so closely allied to man in physical structure, had been completed in the first half of the Tertiary period. Unless we assume direct descent, and not parallel development for the two species, why should the starting-point of man be later than that of the *Dryopithecus*? The horse, whose ancestral pedigree is the best established of any of the existing mammals, was already in existence in the Pliocene period, and the *Hipparion*, which is the first of the links connecting him with the primitive mammal, is first found in the Miocene and not later than the Pliocene. Why should the development of man have begun later, and followed a more rapid course than that of the horse? Man, as M. Quatrefages observes, must, from his superior intelligence and knowledge of fire and clothing, have been more able to resist changes of climate and environment than many of the animals which undoubtedly outlived the change from the Tertiary to the Quaternary period, and even survived the excessive rigor of the Glacial epoch.

If, as seems almost certain, the first origins of man are to be sought as far back as the Miocene, we can hardly expect to find many specimens of the missing link. If we find such an abundance of palæolithic remains early in the Quaternary period, it must be because the human race had long existed, and been driven by the pressure of increasing population to diffuse themselves over nearly the whole of the habitable globe. But this radiation from the original birth-place must have been extremely slow, and immense periods must have elapsed before it reached the countries which have been the fields of scientific research. Again, great geological changes have taken place since the Miocene period, and it is quite probable that the earliest scene of man's development may be now submerged beneath the Atlantic or Pacific Oceans.

In Miocene times, when Greenland and Spitzbergen supported a luxuriant vegetation, such a continent would be found to the north, possibly in that submerged northern continent which afforded a bridge for the passage of so many forms of animal life between the Old and New Worlds. In fact, many geologists incline to the conclusion that the more recent forms of animal and vegetable life have migrated southwards from this circumpolar Miocene land, and not northwards from tropical regions.

In any case the conclusion seems certain, from the failure to discover any missing links in the later formations, that either a vast period of time must have elapsed since man first began to be specialized from the primi-

tive mammalian type, or that he is an exception to the general law of evolution, and owes his origin to some miraculous act of secondary supernatural interference. The solution of this question must be sought in two directions: firstly, the probable duration of the Quaternary period, during which the existence of man as a component part of the Quaternary fauna is no longer doubtful; secondly, the evidence for his existence much farther back into the Tertiary period in common with many of the animal types with which he is associated. This evidence is accumulating, and any day may bring us conclusive proof by the discovery of some "missing link" in the Miocene or Eocene formations, bearing the same relation to man as the *Hipparion* and its ancestors do to the horse. In the meantime, the attitude of the scientific world must be described as one of eager expectation rather than of assured knowledge, and this most important and interesting of all problems must be relegated among the problems of the future.

CHAPTER VII.

ANIMAL MAGNETISM AND SPIRITUALISM.

THE volume by Messrs. Binet and Féré, published in the *International Scientific Series*, gives a lucid view of the recent researches by which the mysterious subjects comprised under the cognate heads of animal magnetism, hypnotism, somnambulism, catalepsy, hallucination, and spiritualism have been, to a considerable extent, brought within the domain of experimental science. The existence of extraordinary phenomena in this misty region had been known since the time of Mesmer, and at times professors of what seemed to be something very like the black art, had excited a temporary sensation, which died out as their tricks were exposed, or as folly changed its fashion. But there was such an atmosphere of imposture, delusion, and superstitious credulity about the whole subject, that rational men, and especially men of science really competent to make experimental inquiries, turned from it in disgust.

The first step towards a really scientific inquiry was made by Dr. Braid, a well-known surgeon in Manchester, about forty-five years ago. He proved conclusively that the state known as mesmerism, or artificial somnambulism, could be produced by straining the eyes for a short time to look at a given object.

A black wafer stuck on a white wall could do just as much as a Mesmer with his flowing robes and magic wand. This led to the further conclusion that anything that strained the attention, or in other words excited certain sensory centres of the brain abnormally, threw it, so to speak, out of gear, and caused both sensory and motor nervous centres to behave in a very extraordinary and unusual manner.

Thus it produced a state of anæsthesia, and if chloroform had not proved a more generally efficacious and manageable agent, hypnotism would probably have been employed to this day in surgical operations. Healing effects also were produced, which bordered very closely on what used to be considered as miraculous cures, and in several cases Braid literally made the blind to see and the lame to walk, by directing a stream of vital energy to a paralyzed nerve.

Still more extraordinary were the effects produced in exalting the faculties and paralyzing the will. Muscular force could in certain cases be so increased that a limb became as rigid as a bar of iron, and memory so stimulated that words and scenes scarcely noticed at the time, and long since forgotten, started into life with wonderful vividness and accuracy.

Thus in one of Dr. Braid's experiments, an ordinary Scotch servant-girl startled him by repeating a passage from the Bible in Hebrew. It turned out that she had been maid to a Scotch minister who was learning Hebrew, and who used to walk about his study reciting passages from the Hebrew text.

Another instance shows the remarkable obliteration of the will in hypnotized subjects. A puritanical old lady, to whom dancing was an abomination, was sent capering about the room by playing a reel tune on a piano, and telling her to join in the dance.

Dr. Braid's experiments, however, did not carry the subject much farther than to make people believe that there was really something in it, and the subsequent rise of spiritualism, with its vulgar machinery of table-turning and spirit-rapping, and frequent exposures in police-courts, once more repelled rational men and consigned the subject to oblivion.

But within the last few years a school has arisen of French medical men, connected with the hospital of Salpetriere, at Paris, who have taken up the subject in a thoroughly scientific spirit, and have arrived at truly wonderful results. This hospital, affording as it does a constant supply of hysterical and epileptic patients, presents peculiar facilities for conducting a series of experiments. In cases of individual experiments there is always danger of error from simulation on the part of the patient, or delusion on that of the operator. But here the experiments were conducted by a body of scientific and sceptical men, selected from the flower of French surgeons and physicians, and the patients were so varied and numerous, that by proper precautions it was possible to eliminate the element of conscious imposture. This supply of a large number of patients, suffering from hysteria and other nervous disorders, was an essential element for success, for it is with this class of patients, and especially of female patients, that the phenomena can be produced with most completeness and certainty. It is a moot point whether all human organisms are subject more or less to the influence of hypnotism; but it is certain that with healthy adults not more than one out of every five or six subjects can be hypnotized at the first attempt, and a great majority of those who can, are only so in a slight degree.

The liability, however, to hypnotic influence increases rapidly by practice, so that nervous patients on whom the process is repeated, may be soon brought into a state in which the slightest hint or suggestion is sufficient to produce the abnormal condition. Thus a highly sensitive patient may be hypnotized, if led to believe that an operator is making passes in an adjoining room, although he is not really there; while, on the other hand, the weight of evidence is against any effect being produced by real passes, if the patient is totally unaware of anything of the sort going on, or being expected.

But with the class of patients at the Salpetriere, the various effects can, in many cases, be produced with as much precision and certainty, as

when a bar of iron is magnetized or de-magnetized by turning on or off an electric current through a coil of copper wire surrounding it.

These effects may be classed under two heads—physical, and mental or psychical. Not but that the latter depend ultimately on mechanical movements of nerve-centres of the brain, but they are connected with will, consciousness, and other phenomena which we are accustomed to consider as mental. The purely physical efforts, again, may be classified under three heads, viz.: those of lethargy, catalepsy, and somnambulism. The divisions shade off into one another, but the typical states are sufficiently distinct to justify this classification, which is due to M. Charcot, the Director of the Salpêtrière.

In lethargy the patient appears to be in the deepest sleep. In fact, all the functions of mind and body, except the bare life, seem to be suspended. The eyes are closed, the body is perfectly helpless; the limbs hang slackly down, and if they are raised they drop heavily into the same position. The characteristic feature of this state is that any excitement of the muscles either direct or through a stimulus applied to the connecting motor nerve produces what is called a contracture. Thus if the ulnar nerve is pressed, the third and fourth fingers of the corresponding hand are forcibly contracted, and so for every other nerve and corresponding muscle of the body. This evidently affords a perfect security against simulation, for no one who was not a skilled anatomist would know what muscles were connected with a particular nerve.

One of the most remarkable phenomena connected with these contractures is that they may be produced by a magnet not in physical contact with the nerve or muscle excited, and still more wonderful, that it may be transferred by a magnet from one side of the body to the other. Thus if the fingers of the right hand have been contracted by pressure on the ulnar nerve of the right arm, and a magnet is brought close to that nerve, both hands become agitated with slight jerking movements, and soon the contracture of the right fingers ceases, and is transferred to the same fingers of the left hand. We shall see later that in more advanced stage of hypnotism still more marvellous effects are produced by the magnet, even to the extent of transferring moral emotions into their opposites, as love into hatred, or hatred into love.

In the meantime, it may be sufficient to observe that these experiments with the magnet seem to point out the most likely way of bringing these mysterious phenomena within the domain of accurate science, and here the researches of the Salpêtrière school seem to be deficient. We are merely told that the magnet produces certain effects, but we want to know at what distance does it produce these effects. Do the effects and distance vary with the power of the magnet? are they produced differently by the presentation of the positive or negative pole? are they produced by an electro-magnet or by electric currents? is there any and what reaction by the nerve or muscle on the magnet? and other similar ques-

tions. When these are certainly known and can be expressed in terms of weight and movement, we shall have made the first solid and secure step in advance towards a solution of the more complicated problems.

The next stage is that of catalepsy, into which lethargy may be made to pass by simply opening the eyelids. But although so closely allied to lethargy, the states are very different. In catalepsy all power of movement, or of resistance to movement, is absolutely suspended, and the body is like a lump of plastic clay, which may be moulded into, and will retain, any form given to it by the operator. In fact the subject becomes a lay figure, with this difference only, that he remains so only for some ten or fifteen minutes, after which the constrained positions give way to natural ones. But that he is a *bonâ fide* lay figure for the time is proved by registering the movements of the extended arm and the regularity of the respiration, by means of tracing instruments, and comparing them with those of a healthy man voluntarily assuming the same position. The contrast of the tracings is most remarkable. That of the arm extended by catalepsy is a straight line showing absolutely no tremors; while that of the arm voluntarily extended, shows such a series of abrupt and increasing oscillations as to make it quite conceivable how thought-reading may be possible by contact between persons of exceptionally delicate nervous organization.

Another remarkable feature in catalepsy is that the position in which the body is placed seems to react on the mind, and call up the emotions, and their reflex muscular motions, which are habitually associated with the attitude. Thus if the head is depressed the face assumes the expression of humility; if elevated that of pride.

The most extraordinary phenomena known are those of somnambulism and of the artificial somnambulism which is produced by animal magnetism or hypnotism. These are of various stages, graduating from that of ordinary waking dreams to that of profound hypnotism in which will, consciousness, memory, and perception, are affected in a way which at first sight appears to be truly magical or supernatural. The symptoms may be classed for convenience as physical or psychical, although the latter are really physical, depending ultimately on movements of nerve-centres.

The direct physical effect seems to be the exact opposite of that of lethargy, viz.: that the senses, instead of being asleep, have their sensibility exalted in an extraordinary degree. Thus subjects feel the heat or cold produced by breathing from the mouth at a distance of several yards. The hearing is so acute that a conversation may be overheard which is carried on in the floor below.

The amount of this exaltation of the senses can almost be measured. There is a familiar experiment in which the impression of two points, as of separate pencils near one another, is felt as one, and an instrument has been constructed, known as Weber's compasses, which measures the

amount of deviation necessary to produce a twofold sensation. This deviation appears to be six times greater in the waking than in the somnambulistic state, whence it may be inferred that the sensibility of the sense of touch has been exalted sixfold.

A similar exaltation is produced in the faculty of memory, as shown in the instance already quoted, in which an ignorant servant-girl recited a long passage in Hebrew. As in dreams, perceptions long since photographed on the brain and completely forgotten seem to be revived with all the vividness of actually present perceptions, when recalled by some association with the dominant idea which has taken possession of the mind. This arises doubtless, in a great measure, from the mind being closed against the innumerable other impressions which, in the waking state, wholly or partially neutralize any one suggested idea, and weaken its impression. Thus a somnambulist walks securely along a narrow plank, because no other outward impressions of surrounding objects confuse his mind with suggestions of danger.

It is, however, when we come to the partly psychical phenomena of hallucination and suggestion, that the results are most startling and most opposed to ordinary experience. What is an hallucination? It may be described in one word as seeing the invisible and not seeing the visible. And the same of the other senses. They not only deceive us, but give evidence directly contradictory of that of the waking senses. We hear the inaudible, and are deaf to the audible; we touch the intangible, and lose touch of the tangible; bitter tastes sweet, and sweet bitter. The fundamental fact seems to be, that if certain conditions or molecular movements of certain sensory nerve-centres of the brain are caused, no matter how, the corresponding perceptions, with their train of associated ideas and reflex movements, inevitably follow. In the normal waking state these conditions are created by real objects conveyed to the brain through the senses. We see a man, and we conclude him to be a real man because our other senses confirm the testimony of sight. If he speaks we hear him, if we touch him we feel him, and the evidence of all other people who see and hear him confirms our experience. But in dreams we have the commencement of a different experience, for we see and hear distinctly for the time, though in a fleeting and imperfect manner, scenes and persons which have no real objective existence. In hallucinations we have the same thing, only in a waking or partially waking state, and the impressions made are vastly more vivid and permanent.

Take the following as instances of positive hypnotic hallucinations, or seeing the invisible, recorded by Messrs. Binet and Féré from their experience at the Salpêtrière. A patient told to look at a butterfly which had just alighted on the table before her, immediately said, "Oh, what a beautiful butterfly," and proceeded cautiously to catch it and impale the imaginary butterfly with a pin on a piece of cardboard. Another patient

being shown a photographic plate with an impression of a scene in the Pyrenees, and told that it was a portrait of herself in a very unbecoming dress, or rather want of dress, immediately saw it so, and was so enraged, that she threw the plate on the ground and stamped on it. And what is remarkable, as showing the intensity and persistency of these hallucinations, for nearly two months afterwards, when shown in her waking state photographs of this landscape which had been taken from the plate, she saw her own portrait, and fell into fits of passion. In another case, a patient being told that one of the hospital doctors would be present at a ball to be given next night among the inmates of Salpetriere, saw, conversed, and walked about with this imaginary doctor, who was not really present, and when she saw the real man the day after, could not recognize him until she had been again hypnotized, and the hallucination dispelled.

The negative experiences of making the visible invisible are even more extraordinary. Take the following case. "We suggested to a hypnotized patient that when she awoke she would be unable to see F——. She could not see him, and asked what had become of him. We replied, 'He has gone out; you may return to your room.' She rose, said good morning, and going to the door knocked up against F——, who had placed himself before it. We next took a hat, which she saw quite well, and touched it so as to be sure that it was really there. We placed it on F——'s head, and words cannot express her surprise when she saw the hat apparently suspended in the air. F—— took off the hat and saluted her with it several times, when she saw it, without any support, describing curves in the air. She declared the hat must be suspended by a string, and even got on a chair to feel for it."

Numerous other instances equally remarkable are recorded, and there is a whole class of cases in which suggestions impressed on the subject's mind in a state of hypnotism may long afterwards, and when totally forgotten, be revived at predicted periods, with irresistible force, in the waking mind and produce the effects corresponding to the idea as by an inevitable piece of machinery. This brings the subject within the domain of criminal jurisprudence, for there is abundant evidence that a normally moral person may obey a hypnotic suggestion which had been totally forgotten, even to the extent of committing the greatest crimes, as attempting to stab or administer poison. Thus M. Féré relates that having ordered a subject in a state of somnambulism on awakening to stab M. B—— with the pasteboard knife he put into her hand, as soon as she awoke she rushed on him and struck him in the region of the heart. M. B—— feigned to fall down. The subject, being asked why she had killed him, replied with an expression of ferocity, "He is an old villain and wished to insult me."

It is evident that if these phenomena are real, hypnotism ought to be regulated by law as much as the far less dangerous practice of vivisection. The practice of it should be confined to licensed medical practitioners,

and under conditions requiring the presence of at least two or more witnesses, one of whom, especially in the case of females, should be some respectable friend or relative. I prefer, however, not to dwell on this branch of the question, but to return to its purely scientific and philosophical aspects.

The purely mechanical origin of these hallucinations is shown by a number of interesting experiments. An hallucinatory image can be reflected, refracted, or made to appear double, in precisely the same manner as a real one. Thus in what is known as Brewster's experiment, where an image is duplicated by a slight lateral pressure on one eye throwing it out of focus with the other, the same effect is produced. A case is recorded where an hysterical patient who had a vision of the Virgin Mary appearing in great glory, saw two Virgins directly this lateral pressure was applied. Complementary colors also appear to an hallucinatory image of a red or green spot on a sheet of white cardboard, just as they would in the waking state if the spot were real. The magnet also, by a purely mechanical action, transfers unilateral hallucinations which affect one eye only, from the right to the left eye, and *vice versa*, and it may be made to destroy an hallucination, as when X—— was made invisible to an hypnotic subject, on applying a magnet to the back of the head, X—— again became visible.

And what is still more wonderful, the magnet is capable of transferring emotions. Thus the idea was impressed on a hypnotized subject, that on awaking she would feel a desire to strike F——. A magnet was placed near her right foot. On awaking, she jumped up and tried to give F—— a slap, saying, "I do not know why, but I feel a desire to strike him." In another moment, her face assumed a gentle and endearing expression, and she said, "I want to embrace him," and tried hard to do so. Consecutive oscillations between love and hatred were then observed.

Another most remarkable phenomenon is recorded. It was suggested to a subject X—— that she had become M. F——. On awaking, she was unable to see M. F——, who was present, but she exactly imitated his gestures, put her hands in her pockets, and stroked an imaginary moustache. When asked if she was acquainted with herself, X——, she replied with a contemptuous shrug, "Oh, yes, an hysterical patient. What do you think of her? She is not too wise."

There are two experiments recorded which throw a good deal of light on the phenomena of what is known as spiritualism. In slight hypnotism, the subject assert, on awaking, that they have never for a moment lost consciousness, and that they have been present as witness at the phenomena of suggestion developed by the magnetizers. In another case, the furniture of the room seemed to the subject to be noisily moved about by invisible hands, being really displaced by F——, who had been rendered invisible by suggestion. It is evident that if there is any real residue of facts in the phenomena of spiritualistic *séances*, after deducting what is

due to legerdemain and imposture, the above experiments would go a long way to account for them. The preliminaries of a *séance*, such as darkened rooms, contact of hands, and excited imagination, are almost identical with those employed by Mesmer, and it would be contrary to experience if they did not frequently produce, on susceptible subjects, hypnotic effects which made them susceptible to hallucinating suggestions. If so, there is no doubt that they might see tables move and Mr. Home float in the air, with a full conviction that they were awake all the time and in possession of their ordinary senses.

This much I would observe, that all these attempts to escape from the inexorable laws of nature invariably fail. Spiritualism is grasped at by many because it seems to hold out a hope of escaping from those laws and proving the existence of disembodied spirits. But when analyzed by science, spiritualism leads straight to materialism. What are we to think of free will, if, as in the case of Dr. Braid's old lady, it can be annihilated and the will of another brain substituted for it, by the simple mechanical expedient of looking at a black wafer struck on a white wall? Or what becomes of personal consciousness and identity if, as in the case above quoted, a young woman can be brought to refer to herself with contemptuous pity as a strange girl, who "was not over wise"? These cases of an alternating identity are most perplexing, Smith falls into a trance and believes himself to be Jones. He really is Jones, and Smith has become a stranger to him while the trance lasts; but when he awakes he is himself, Smith, again, and forgets all about Jones. He falls into another trance, and straightway he forgets Smith and takes up his Jones existence where he dropped it in the previous trance, and so he may go on alternating between Smith and Jones. I often ask myself the question—If he died during one of his trances which would he be Smith or Jones? and I confess that it takes some one wiser than I am to answer it.

Again, what can be said of love and hate, if under given circumstances they can be transformed into one another by the action of a magnet? It is evident that these phenomena all point to the conclusion that all we call soul, spirit, consciousness, and personal identity, are indissolubly connected with mechanical movements of the material elements of nerve-cells, and that if we want any further solution, we must go down deeper and ask what this matter, and what these movements, or rather the energy which causes them, may really mean. Can the antithesis between soul and body, spirit and matter, be solved by being both resolved into one eternal and universal substratum of existence? When Shakespeare said—

"We are such stuff as dreams are made of,"

he enunciated what has become a scientific fact. The "stuff" is in all cases the same—vibratory motions of nerve-particles.

The researches of the French school of physiologists throw a good deal of light on the mysterious regions of phenomena, or alleged phenomena,

which are classed under the general heads of thought-reading, clairvoyance, and spiritualism. Those of thought-reading and clairvoyance may be summed up in the question whether or no it is possible for one brain to communicate with another, otherwise, than through the ordinary medium of the senses. It is certain that in the immense majority of cases it is not possible. Consider how the ideas or perceptions of A are communicated to B. Certain movements of the brain-cells of A which are, if not the cause, the invariable concomitants of those ideas and perceptions, send currents along the nerves, which at their extremities contract muscles and cause movements. These are transmitted, in the case of hearing, by sound-waves of air; in that of sight by light-waves of ether, to the nerve-endings of B, and along those nerves to his brain, where they originate cell-movements corresponding to the original movements in the brain of A, and which are accompanied by the same train of ideas and perceptions. In the sense of touch, there is no intermediate medium between the nerve-endings of A and B, and the movements of the former are communicated directly to those of B by contact. The senses of taste and smell are hardly used by the human species as means of communicating ideas, though in many animal species, as in the dog, the latter sense is one which is greatly used in placing them in relation with their environment,

This also may be affirmed respecting the different senses, that they are capable of being brought to an exceptional degree of susceptibility by necessity and practice, as is well illustrated by the facility with which the blind substitute the sense of touch for that of sight, and read fluently books printed with raised letters. The sense of sight also may be brought to a degree of unusual acuteness, enabling the observer to read indications in the face and expression so slight as to be invisible to the ordinary sense, and of which the person observed is himself unconscious. A remarkable instance of this is given by Sir John Lubbock, of a dog who could pick out from a series of numbers on cards laid on the floor the correct answer of sums in arithmetic, and even extract cube-roots, doubtless by observing unconscious indications in his master's face when he touched the correct card.

This, no doubt, goes a long way towards explaining the phenomena of what is called thought-reading. It is quite conceivable that, with contact, an exceptionally delicate sense of touch, exceptionally cultivated, may enable a man to read the insensible tremors which are unconsciously transmitted to nerve-ends and superficial muscles, the existence of which is a necessary consequence of all brain-motion or thought, and which is proved to exist as a matter of fact by the irregularities in the line traced by a pencil under suitable conditions. And it is to be remarked that keeping the mind fixed on the idea, in other words, making the corresponding brain-motions and nerve-currents stronger and more persistent, is the condition usually required for a successful experiment in thought-reading.

Thus far, and Mr. Cumberland the most successful thought-reader of the day carries it no farther, there is nothing impossible, or even *à priori* improbable, in the assertion that thought may be thus read. It is a question of evidence, and here the weight of the negative evidence is so great that it requires extremely strong proof to establish exceptions. It is a matter of notoriety that persons, even of delicate temperaments, may lie in the closest contact, clasped in each other's arms, without either having the remotest idea of what is passing in the mind of the other, unless it is conveyed by the ordinary channels of sight or hearing. On the other hand, the evidence for a few rare exceptions is strong, especially in the case of some of Mr. Cumberland's experiments, which are all the stronger because he does not pretend to any supernatural power, and shows none of the ordinary signs of an impostor. All we can say, therefore, is that where there is no contact, or where unconscious indications may be read by the eye, there is nothing in thought-reading inconsistent with the known laws of nature ; but that the evidence, though strong, is hardly strong enough to enable us to accept it as an established fact.

But when we come to thought-reading at a distance, and to the analogous alleged phenomena of clairvoyance, fulfilled dreams and visions, and communications across the globe, mostly from the dead and dying, such as are so plentifully recorded in the annals of the Psychical Research Society, the case is different. If they are true, we must assume either a reversal of the known laws of nature, or an otherwise unknown and unproved addition to them. Vibrations cannot be transmitted without a medium, and in the supposed cases the medium is certainly not the air which transmits sound-waves, or the ether which transmits waves of light, heat, and chemical energy, or any modification of it which transmits magnetism or electricity. It must either be some sort of personal aura, or a universal aura which pervades space, and is specially adapted for transmitting brain and nerve vibrations, and those only. But the evidence is overwhelming against the existence of such a medium. In the case of the real mediums, air and ether, they respond invariably and uniformly to the same stimuli ; but we may point our fingers to the end of time to a magnet without making it vibrate, and think for ever of absent friends without conveying to them the slightest intimation. It is only in the rarest exceptional cases that the contrary is even alleged, and that only under conditions which may either be accounted for by coincidence or imposture, or which not only lie outside of, but directly in conflict with, known laws of nature. This is most apparent in the cases which fall under the heads of clairvoyance or supernatural communications. Consider the enormous number of dreams, 300,000,000 at least, of civilized human beings dreaming for most nights of the year, and these dreams all made up of fragments of actual scenes and persons, which have been photographed on the brain. The wonder is not that there should be occasional coincidences between dreams and contemporaneous or subse-

quent occurrences, but that there should be so few of them. How many anxious brains must have dreamt of absent friends or relations dying or in danger, and in how many millions of cases must the dream not have been verified. And how many vivid dreams, or dreams in the dozing state, between sleeping and waking, must have passed into the stage of hallucination, and been taken for actual visions. And how weak is memory, and how strong the myth-making propensity of the human mind to convert these dreams and visions into waking realities. Of the many cases of distant communications collected by the Psychical Research Society, I do not know of one which may not be thus accounted for; and in some the proof is conclusive, as where visions have been seen or impressions felt of events before they occurred, owing to the difference of time due to longitude.

In the case of spiritualism it is remarkable that it is only the more vulgar and grotesque forms which there is any difficulty in explaining. We understand how spirits are materialized, for the apparatus has been frequently exposed in the police-courts; there is nothing very mysterious in the way in which slight hints and clues are followed up by professional mediums. And there is this conclusive consideration that the spirits never say or know anything which has not passed through the mind of the medium. If he is illiterate, the spirits would be plucked for their spelling; if he is weak in his h's, so are they; if he makes a mistake or is entrapped into a contradiction, they follow suit. In no single instance has any communication of the slightest use or novelty been made by these visitors from another world.

In short, the whole affair is obviously legerdemain in wrapping or writing on slates, answers to questions known to the medium, supplemented by any hints or clues he may possess, and in the absence of these by such commonplaces as "we are happy," "we are with you." I saw a conclusive proof of this in the only experience I ever had with a professional medium, one of great repute. The question put was, "What was my mother's Christian name?" This was written on a slate out of sight of the medium, and turned down, and apparently held by one of his hands under a table, while the other hand was held by the questioner. Nothing occurred for a while, but then began a series of groans and twistings by the medium, which I took to be part of the usual conjuror's patter to divert attention; but looking closely, I distinctly saw a corner of the slate reversed under the table, with the writing on it uppermost, followed by the scratching of a pencil, after which the answer was produced, alleged to have been written by the spirits. But mark what the answer was! The "m" of "mother" had been written not very legibly, with the first stroke too long, so that at a hasty glance in a constrained position it might be easily read as "brother." And sure enough the answer came, "Your brother's spirit not being here we do not know his Christian name." This was my first and last experience of omniscient spirits, and it was

perfectly apparent that it was only a piece of very simple and very clumsy legerdemain. No doubt things more marvellous are done by superior legerdemain, but nothing that I have ever heard of that is beyond the resources of legerdemain, or which is so wonderful as the mango and other tricks of Indian jugglers. No one who has not studied the art of legerdemain can be aware how great its resources are, and how completely the senses may be deceived by a skillful operator.

Nor is it at all difficult to understand how slight clues may be used by an experienced operator, to give what are apparently astounding answers. Thus if a medium happens to know that a death has at any time occurred in the family of the questioner, the answer rapped or written out is sure to profess to come from the spirit of the deceased relative.

If any doubt had remained as to the nature of these spiritualistic experiences, it would have been removed by the report made in 1887 by the Scybert Commission. In this case Mr. Scybert, an enthusiastic spiritualist in the United States, bequeathed a considerable sum of money to the University of Philadelphia, on the condition that it should appoint a Commission to investigate modern spiritualism. Ten commissioners were appointed, including several professors and well known men of science; some of whom, including their chairman, Dr. Furness, confessed "to a leaning in favor of the substantial truth of spiritualism." They took great pains with the investigation, which was conducted with scrupulous fairness, and examined many of the most famous mediums, among whom was the well-known Dr. Slade. Their unanimous report was that the whole thing was based on "gross, intentional fraud." They saw distinctly how the tricks were effected, and a professional conjuror, Mr. Kellar, who had been at first baffled by the phenomena of slate-writing, having turned his attention more closely to this branch of conjuring, was able not only to repeat the processes of the best mediums, but to do so with far greater skill, and produce effects which they could not imitate; while he has given a challenge to the spiritualistic world that he will reproduce by sleight-of-hand any alleged spiritualistic phenomena which he has witnessed three times.

This report is so conclusive to any reasonable mind, that it is scarcely necessary to refer to the mass of corroborative evidence to the same effect such for instance as the confession of the Fox family, that the rappings, in which the spiritualistic faith originated, were produced by a knack they had of half-dislocating toe and knee joints, and replacing them with a sudden snap, a knack which, singularly enough, is also possessed by Professor Huxley; the confessions of Home and other exposed mediums; and the experiences of Mr. Davy, Mrs. Sedgwick, and others, related in the last volume of the Psychical Research Society.

Those who are not convinced by such proofs as these are impervious to reason, and it would be a waste of words to argue the matter any farther. It may be assumed as a demonstrated fact, that all the

phenomena which profess to be based on a communication with a spiritual world are, in the words of the Scybert Report, simply instances of vulgar legerdemain, and of human credulity.

It is only when we come to what may be called the tomfoolery of spiritualism, such as unmeaning tricks of dancing chairs and tables, that we are left in doubt how some of the appearances are produced. There is a good deal of evidence from persons whose good faith cannot be doubted, that they have seen pieces of furniture move at the end of a room, without any contact or apparent cause, and that this took place in private houses, where there was no possibility of prepared machinery.

The mediums say it is done by spirit-hands. This is obviously absurd, for it is not a case which lies outside of known laws of Nature, but one which radically conflicts with them. As long as the law of motion holds "that action and reaction are equal and opposite," there can be no action without a solid point of resistance. Archimedes said that he could move the world if you gave him a *πον ἑρως*, or fulcrum, on which to rest his machinery, and the ghost of Archimedes, if summoned from the Elysian fields at the bidding of a seedy professional medium, could say no more. Spirit-hands must be attached to a solid spirit body, standing on solid feet on a solid floor, to lift a weight. And the same thing applies to any supposed magnetic or psychic force enacted by the medium. If the medium pulls the chair, the chair must pull the medium, and it becomes a case of "pull devil, pull baker." If a magnet lifts an iron bar, it is because the magnet is fixed to some point of attachment.

The question therefore resolves itself into one either of hallucination or legerdemain. Do the chairs and tables really move, or only seem to move? There seem no trustworthy evidence as to this fundamental point, and yet it is one easily determined. Does the house-maid when she comes into the room next morning, or any one who has not been under the influence of the *séance*, find the furniture where it was originally, or where it seemed to be? If it was really moved, who moved it? Here, also, hallucination might come into play in another form for if, as described in the experiment of Binet and Féré, already mentioned, the medium could release his hands without being perceived, and render himself invisible by suggestion, or perform the trick in a dark room, he could easily move the chairs himself without being seen. This seems the more probable, as in all the accounts I have read, the articles moved do not exceed the weight which the medium might move, either in his natural condition, or with his muscular strength excited by hypnotism. Assuming a state of hypnotism to be induced in the spectators, the explanation would be easy, and, in fact, identical with many of the scientifically recorded experiments of Binet and Féré. And it is remarkable that the preliminary conditions of the *séance*, such as darkened rooms, clasped hands, and strained attention, are identical with those employed, from Mesmer downwards, in producing real hypnotism.

At the same time, it would seem that the hypnotism (if it be so) introduced at *stances* differs from ordinary hypnotism. The subjects retain the fullest convictions that they have been wide-awake all the time, and in full possession of their ordinary senses. Can there be a state of semi-hypnotism in which the brain, while retaining its full consciousness, is rendered susceptible to suggested hallucinations? If so, the whole matter is explained. If not, it is very singular that the same preliminary operations which produce hypnotism, where hypnotism is expected, should make chairs and tables dance, and bodies float in the air, where that is what the spectators expect to see. But the problem could easily be solved so far as the medium is concerned, by connecting him with an electric current, which would be broken and ring a bell if he moved hand or foot, and seeing whether, under such circumstances, the furniture could be moved.

It is singular that the men of really scientific attainments who profess a belief in spiritualism, such as Professor Crookes and Mr. Wallace, do not seem to have proceeded in this way of accurate experiment pursued by the French school of Salpetriere, even as regards the first rudimentary alleged facts of moving heavy bodies at a distance without apparent contact. Nor do they seem to have thoroughly studied and mastered the resources of legerdemain, which are obviously one of the principal, and in many cases the sole cause of the so-called spiritualistic manifestations, and without a knowledge of which no one is really competent to form an opinion. Indeed, it is questionable whether, when all the more refined tricks of spiritualistic mediums have been so thoroughly exposed, it is worth while to seek for any other hypothesis than that of ordinary conjuring, to account for those mere childish and unmeaning manifestations, the *modus operandi* of which has not yet been fully explained.

It is evident, however, from the well-attested experiments of the French school, that there really is opening up a most interesting field of inquiry as to the relations of mind to matter under certain exceptional conditions, and the extent to which illusions may appear as realities under the influence of excited imagination. Hypnotism, somnambulism, dreams, and hallucinations are becoming exact sciences; and researches pursued in the same manner into the alleged phenomena of spiritualism and thought-reading, would end either in exposing imposture, or in reducing such residuum of truth as they may contain, to known laws analogous to those which prevail in other branches of physiological and psychological investigation.

In the meantime, I conclude by saying that, so far as we have yet gone, the whole of what is called "spiritualism" seems to be quite dreadfully "materialistic." The one fact which comes out with demonstrated certainty is, that definite ideas are indissolubly connected with definite vibrations of brain-cells; and that however these vibrations are induced, the corresponding ideas and perceptions inevitably follow. In the ordinary

course of things these vibrations are induced by what are called realities acting through the senses, and by the normal action of the brain-cells on the perceptions thus received and stored up.

But this applies only to about two-thirds of our existence, viz., the waking state. In sleep and dreams, the vibrations set up are from former perceptions, photographed on the brain, and grouped together in unreal and often fantastic pictures. In somnambulism this is carried to a further point, and we act our dreams. In hypnotism it is carried still farther, and the vibrations are excited by a foreign will, and by foreign suggestions. In the ultimate state, madness, the hallucinations have become permanent. But what strange questions does it raise when we find that, in certain abnormal conditions, all that is most intimately connected with what we call soul, individuality and consciousness, can be annihilated, or exchanged for those of another person, by the mechanical process of exciting their corresponding brain-motions in another way. What are love and hate, if a magnet applied to a hypnotized patient can transform one into the other? What is personal identity, if the suggestion of a third person can make an hysterical girl forget it so completely, as to make her talk of herself as a distant acquaintance "who is not over wise"? What is the value of the evidence of the senses, if a similar suggestion can make us see the hat, but not the man who wears it, or dance half the night with an imaginary partner? Am I "I myself, I," or am I a barrel-organ, playing "God save the Queen," if the stops are set in the normal fashion, but the "Marseillaise" if some cunning hand has altered them without my knowledge? These are questions which I cannot answer. All that I can say is, that practically the wisest thing I can do is to keep myself, as far as possible, in the sphere of normal conditions, and assume its conclusions to be real; avoiding, except as a matter for strict scientific investigation, the various abnormal paths which, in one way or other, all converge towards the ultimate end of insanity.

CHAPTER VIII.

THE RELIGION OF THE FUTURE. AGNOSTICISM AND CHRISTIANITY.

PART I.

IS Agnosticism reconcilable with Christianity, or are they hopelessly antagonistic? That depends on the definition we give to the two terms. That of Agnosticism is very simple. It is contained in the sentence of Professor Huxley's, "That we know nothing of what may be beyond phenomena," and "that a man shall not say he knows or believes that which he has no scientific grounds for professing to know or believe." This is not a positive or aggressive creed, and is reconcilable with any form of moral, intellectual, or religious belief which is not dogmatic—*i. e.*, which does not attempt to impose on us some hard-and-fast theory of the universe, based on attempts to define the indefinable and explain the unknowable. The definition of Christianity is by no means so simple. Practical Christianity resolves itself very much, and more and more every day, into a sincere love and admiration of the life and teaching of Jesus, the son of the carpenter of Nazareth, as depicted in the narratives which have come down to us respecting them, mainly in the Synoptic Gospels. This love and admiration translates itself into a desire to imitate as far as possible this life and to act upon these precepts; to be good, pure, loving, charitable, and unselfish even to the death.

With this form of Christianity the Agnostic has no quarrel; on the contrary, if he is not dwarfed and stunted in his faculties, if he has a heart to feel and an imagination to conceive, he recognizes as fully as the most devout Christian all that is good and beautiful in the true spirit of Christianity and its author. Nay, more, he will not quarrel with the mass of humble and simple-minded Christians who show their love and admiration by piling up adjectives until they reach the supreme one of "divine," and who, in obedience to the ineradicable instinct of the human mind to personify abstract ideas and emotions, make Jesus of Nazareth their Ormuzd, or incarnation of the good principle, and author of all that is pure, righteous, and lovely in the universe.

But there is another definition of Christianity of a totally different character—the dogmatic or theological definition, which, commencing with St. Paul and St. John, and culminating in the Athanasian Creed, has

been accepted from the early ages of Christianity, almost until the present day, as the miraculous revelation of the true theory of the universe. It teaches how a personal God created the universe, how He deals with it and sustains it, how He formed man in His own image, and what relations He has with him. It professes to explain mysteries such as the origin of evil, man's fall and redemption, his life beyond the grave, the conditions of his salvation, and a variety of other matters which, to ordinary human perception and human reason, are absolutely and certainly hidden "behind the veil."

With this definition of Christianity Agnosticism has nothing in common. It cannot be both true that we know certain things and that we do not and cannot know anything about them. Theology asserts that we are quite capable of knowing the truth respecting these mysteries, and that, in point of fact, we do know it, either by intuition or by historical evidence. Philosophy traverses the assertion that we know it by intuition; Science shatters into fragments the scheme assumed to be taught historically by a miraculous revelation.

To begin with intuition. It rests on Cardinal Newman's celebrated theory of the "Illative sense," or a complete assent of all the faculties, which gives a more absolute proof than any that can be attached to proofs of science, which are only deductions from certain limited faculties, such as experience and reason. This is very clearly put by Father Dalgairns in a discussion on "The Uniformity of Laws of Nature" at the Metaphysical Society. He says: "I believe in God in the same sense in which I believe in pain and pleasure, in space and time, in right and wrong, in myself. If I do not know God, then I know nothing whatever." That is, the idea of such a being as the God of theology, a personal creator of the universe, with faculties like, though transcendently like, those of man, appears to him a necessary postulate, or rather a fundamental instinct or mould of thought, as universal and imperative as those of space and time. Now is this so? It is at once refuted by the fact that it is not universal and not imperative. The immense majority of mankind, both now and in all past ages, have had no such intuition. It is the refined product of an advanced civilization, confined to a few exceptional minds of high culture, acute intellect, and tender conscience. Even in Christian countries it is an affair of education and authority, rather than of necessary intuition; and even those who assert most loudly that it is a fundamental category of thought, complain that ninety-nine men out of every hundred in modern England live practically as if there were no God. Not so with the real categories of thought and perceptions. No man, past or present, in Monotheistic, Pantheistic, or Polytheistic countries, has ever lived practically as if there were no such things as space and time, or as if such primary perceptions as those of pain and pleasure had no real existence. These have never deceived us; but the instances are innumerable in which the "illative sense," the complete, earnest, and conscien-

tious assent of all the faculties, has deceived us, and has led to conclusions which a wider knowledge has shown to be not only erroneous, but, in many cases, absurd and noxious.

When closely analyzed, the theological idea of God may be clearly seen to be an attempt to define the indefinable. The primary idea is that of a creator. But what is creation? Making a thing, in the sense in which alone man makes anything—that is, transforming existing matter and energy into new forms—we can understand. As we make a watch or a steam-engine, we can conceive how a Being, with faculties like our own, but indefinitely magnified, might make a universe out of atoms and energies, and make it so perfectly that it would go for ever. But how He could make something out of nothing, which is what creation really implies, altogether passes our understanding. We have absolutely no faculties which enable us to form even the remotest conception of what those atoms and energies really are, how they came there, or what will become of them.

The more closely we examine, the clearer it will appear that these theological intuitions are, in effect, nothing but aspirations; or reflections, like Brocken spectres, of our earnest longings, fears, and hopes on the back-ground mists of the Unknowable; and that all the attempted definitions are mere juggles with words which convey no real meaning. We talk of creation, but when it comes to the point we find that we really mean transformation, and that of creation, properly speaking, we have no more idea than the babe unborn. We talk of immortality, but what we were before we were born, or what we shall be after we die, what soul, consciousness, personal identity, really are, how they came to be indissolubly connected with matter, and what they will be when that union is dissolved, are mysteries as to which we can only make guesses, like the Brahmins and Buddhists, whose guess is transmigration, or the Red Indians, whose guess is a happy hunting-ground beyond the setting sun.

The greatest philosophers have come to this as the ultimate fact of their metaphysical reasonings. Descartes says, "that by natural reason we can make many conjectures about the soul, and have flattering hopes, but no assurance." Kant confesses that reason can never prove the existence of a God. Even great theologians, in the midst of their dogmatic definitions, let drop admissions which show that, at the bottom of their hearts, they feel their ignorance of the high mysteries of which they talk so confidently. The Athanasian Creed, the very essence and incarnation of dogmatism, says "the Father incomprehensible" in the midst of a long series of articles, every one of which is absolutely devoid of meaning unless on the assumption that He is comprehensible, and that St. Athanasius rightly comprehended him. St. Augustine writes, "God is unspeakable," and then proceeds, in a long treatise on "Christian Doctrine," to speak of Him as if he knew all about His personality, attributes, and

ways of dealing with the world and man. Even St. Paul says, "O the depths of God! how unsearchable are His judgments, and how inscrutable are His ways!"

What more have Huxley and Herbert Spencer ever said? Only they have said it deliberately, consistently, and knowing the reason why; while theologians, admitting the premises, have preferred to act and argue as if a totally different set of premises were true. The cause is obvious: Reason failing, they have fallen back on Revelation. They had an assured belief that an inspired volume, attested by miracles, taught things respecting these mysteries which otherwise must have remained unknown. Thus Coleridge, who, of those who have attempted to base Christian theology on abstract reason, occupies a foremost place, arrives at this conclusion, that "a Christian philosophy or theology has its own assumptions, resting on three ultimate facts—namely, the reality of the law of conscience, the existence of a responsible will as the subject of that law, and, lastly, the existence of God. The first is a fact of consciousness; the second, of reason necessarily concluded from the first; the third, a fact of history interpreted by both." He clearly sees that any certain knowledge respecting the existence of God, and the various conclusions deduced from it by Christian theology (such as the creation of man, his fall and redemption, the origin of sin and evil, atonement, grace, and predestination), if a fact at all, is a *fact of history*—that is, depends on a conviction that these mysteries were actually revealed as recorded by the Bible, and that the Bible is an inspired book attested by historical facts; that it contains prophecies which really were fulfilled, and describes miracles which actually occurred.

This assumption has turned out to be a broken reed. In face of the discoveries of recent science, no reasonable man doubts that, beautiful and admirable as the Bible, and especially the New Testament, may be in many parts, it is not a true, and therefore not a Divine, revelation of the scheme of the universe. It is not true that the world was created as described by Genesis; that man is a recent creation made in God's image, who fell from his high estate by an act of disobedience; or that the course of things is regulated by a special personal providence, frequently interfering by miracles with the course of evolution and the uniformity of the laws of nature. The cause of miracles may be considered as out of court when even enlightened advocates who hold a brief for them, like Dr. Temple, a Bishop of the Anglican Church, throw it up and declare "that all the countless varieties of the universe were provided for by an original impress, and not by special acts of creation modifying what had previously been made."

Dogmatic theology, therefore, having no solid foundation either in abstract reason or in historic facts, and being in hopeless conflict with science, is bound to disappear; and even now, in addressing enlightened and impartial men, it may be taken as "*une quantité négligeable*." This

being the case, the barrier which separates Agnosticism from Christianity is to a great extent removed. The term "Christian Agnostic" is coming more and more to the front in the thoughts and utterances of enlightened Christian men. I notice these with pleasure, for it is always more profitable to find points of agreement rather than of difference with sincere and reasonable men. A Professor of Divinity, preaching in the University of Oxford a short time ago, said: "The field of speculative theology may be regarded as almost exhausted: we must be content henceforward to be Christian Agnostics." Canon Freemantle, in an article in the *Fortnightly Review*, quotes this with approval. In the course of a very able argument on the changed conditions of theology, he says that "theologians, in defiance of Aristotle's axiom, that you must not expect demonstration from a rhetorician, have begun with axioms and definitions and proceeded to demonstrations. They have said or 'proved' that God is just or good, God is personal, God is omniscient and omnipotent; and they have used these phrases, not in a literary, but in a quasi-scientific manner, and have proceeded to draw strict inferences from them. But, in doing this, they have not only acted in the way of unwarrantable assumptions; they have often produced what St. Paul termed the vain janglings of a science falsely so called; have enslaved the Divine to their own puny conceptions, and have provoked violent revolt."

This is precisely what Agnostics contend for. They do not deny that, in the course of evolution, certain feelings and aspirations have grown up and come to be part of the mental furniture of civilized nations, which find a poetical expression in the ideas of God and of immortality. They simply deny that we have, or ever can have, any certain, definite, and scientific knowledge respecting these mysteries. To take an instance, that of the pre-existence of the soul before birth. We recognize a certain poetical truth in Wordsworth's noble ode when he asserts this pre-existence, and tells us that in infancy

"Trailing clouds of glory do we come
From God, who is our home,"

But we do not accept it as a known or knowable fact. We have absolutely no experience of any consciousness or personal identity before birth, or as existing otherwise than in association with the matter and energy of our corporeal body. No more have we of any continuance of that identity after death. It is "behind the veil," in that great region of the "Unknowable," where nothing is known, and therefore all things are possible. Here Agnosticism comes in as a powerful auxiliary to those emotions and aspirations which constitute what is called "religion." It is the best of all arguments against Atheism and Materialism, for, if we cannot prove an affirmative, still less can we prove a negative. No man who understands what knowledge really means can affirm that any conception of what may exist in the great Unknowable which compasses

us about on every side, is impossible. He can only call it impossible when it conflicts with known facts and laws; but as long as it remains in the region of poetical imagination or moral emotion he cannot disprove it, and may even, if he finds consolation or guidance from it, give it a sort of provisional assent. Thus no Agnostic can deny that, if he had faculties to see Him, there might be in the Unknowable a Divine spirit or substratum, bearing some resemblance to what enlightened men understand by the term "God"; that there may be a Divine eye watching his every thought and recording his every action; and he will not be acting unwisely if he endeavors to mould his life as if this were a true supposition. Only he does not pretend to know this as a dogma or certain truth, and therefore he does not quarrel with any brother-man who thinks differently, or who fancies that he has more certain assurance. Christian morality he recognizes fully, not as taught by the later inventions of churches and casuists, but as displayed in the life and teachings of Jesus, the son of the carpenter of Nazareth, as they stand out, when stripped of their mythical and supernatural attributes, in the narrative of the Gospels. He looks on these moral precepts as the results of a long process of evolution in the best minds of the best races, and not as arbitrary rules, invented for the first time, and imposed from without by miraculous teaching; and he sees in Jesus simply the brightest example and best model of a large class of the virtues which are most needed to make practical life pure, lovely, and of good repute. In this sense may we not all shake hands in the near future and be "Christian Agnostics"?

The tide is already running breast-high in this direction. During the last half-century how many of the foremost men of light and leading have drifted towards orthodox Christianity, and how many away from it? Darwin, Herbert Spencer, Huxley, Carlyle, Mill, all the great thinkers who have influenced the currents of modern thought, are men who had renounced all belief in the traditional theories of miracles and inspiration, and who, a few centuries earlier, would have been burned as heretics. The conversions have been all one way. Darwin, greatest of all, was an orthodox believer in his early life, and had even contemplated taking orders before he embarked on his mission of naturalist to the expedition of the *Beagle*. In his case no violent impulse or sudden crisis changed his views; but the theological mists simply melted away as the sun of Science rose higher above his horizon. Patiently he worked out his great work, guided solely by his unswerving allegiance to truth, until his conception of the universe as the product, not of innumerable supernatural interferences, but of evolution by natural law, became the creed of all men of all countries who are able to appreciate scientific facts and evidence.

But Darwin and men of scientific training are not the only ones who have exchanged the old for the new standpoint. Conversions have been even more remarkable among eminent leaders in literature and philoso-

phy, who were brought up in the strictest traditions of the old religious beliefs. In another work ¹ I have called attention to the fact that, if ever there were three minds trained under the strongest influences binding them to typical though different forms of faith in Christian theology, they are Carlyle, George Eliot, and Renan. Carlyle was a Puritan of the Puritans, bred in a farm-house, whose inmates might have been Covenanters who fought against Claverhouse at Drumclog; George Eliot was, in her surroundings and early life, a typical representative of middle-class English Evangelicalism; Renan of the simple Catholic piety of Breton peasants, developed in an ecclesiastical seminary. How came they, all three, to break away, with a painful wrench, from old ideas and associations, and become leaders of advanced thought? How, indeed, except that they were sincere searchers after truth, and that truth compelled them? If the case for miracles and the inspiration of the Bible had been convincing or even plausible, is it conceivable that Carlyle, George Eliot, and Renan should have all three rejected it? Where are the conversions that can be shown in the opposite direction? Where the leading minds which, bred in the doctrine of Darwinism, have abandoned it for the doctrine of St. Athanasius or of Calvin? The few eminent men who still adhere to the old theology, such as Cardinal Newman and Mr. Gladstone, are all of the old generation which is passing away. Where are their successors? Where are the rising naturalists who are to refute Darwin? where the young geologists who are to dethrone Lyell? where the Biblical critics who are to answer Strauss?

Perhaps the best proof of the irresistible force of the movement is afforded by the attitude of those who still remain within the pale of the Church and are among its most distinguished members. Three eminent Bishops of the Anglican Church preached sermons in Manchester Cathedral, during the meeting of the British Association there in 1887, which were published in a pamphlet, under the title of *The Advance of Science*. They adopt the doctrine of Evolution and the conclusions of modern science so frankly that Huxley, reviewing them in the *Nineteenth Century*, says that "theology, acting under the generous impulse of a sudden conversion, has given up everything to science, and, indeed, on one point, has surrendered more than can reasonably be asked." Other bishops, it is true, denounce this as "an effort to get up a non-miraculous invertebrate Christianity," and assert that "Christianity is essentially miraculous, and falls to the ground if miracles never happened." Perfectly true of the old theological Christianity; but, if this is the only Christianity, it is its sentence of death, for it is becoming more and more plain every day that it is as impossible for sincere and educated men to believe in Scripture miracles as it is to believe that the sun stood still in the Valley of Ajalon, or that the world was peopled from pairs of animals shut up, a few centuries ago, in Noah's Ark.

¹ *Modern Science and Modern Thought*.

These truths are rapidly passing from the schools into the streets, and becoming the commonplace possessions of the rank-and-file of thinkers. Thus, in a lower plane of thought and among the strictest sect of believers, we find Spurgeon complaining that, whereas "twenty years ago there was no question of fundamental truth (brethren used to controvert this or that point; but they were at least agreed that whatever the Scripture said should be decisive), now, however, it did not matter what Scripture said; it was rather a question of their own inner consciousness." And, again, that "the position of sitting on the fence is the popular one. There are two or three very learned men who are trying to get down on both sides of the fence at once."

There is something touching in the spectacle of a man like Spurgeon thus finding the solid earth giving way and heaving under his feet, and even the preachers of his own persuasion lapsing into views inconsistent with his own rigid orthodoxy. But does it never occur to him to ask himself why the landmarks are thus drifting steadily past him all in one direction? Is it a question of inner consciousness and human perversity, or is it not rather that a flood-tide of advancing knowledge and allegiance to truth is really setting in and running with increasing velocity?

Another significant symptom of the times is that the popular novel of the day, *Robert Elsmere*, is a life-history of the conversion of a clergyman of noble nature and cultivated mind from orthodoxy to a faith which I have endeavored to explain in these pages and elsewhere as "Agnostic Christianity," or "Christianity without miracles." The gifted authoress describes the process by which his belief in miracles is gradually undermined, and, while his love and admiration for the human Jesus comes out stronger than ever, he feels it impossible to remain in a Church which demands assent to such dogmas as those of the Logos, the Resurrection and the Atonement. Accordingly, he resigns his living, and devotes himself to a life of active charity in the East-end of London, where he labors to found a new religion which shall satisfy reason by rejecting revelation, while it satisfies emotion by dwelling on the lovely character of the carpenter's son of Nazareth. The hero dies, and the new religion remains a pious aspiration; but it is a sign of the altered atmosphere of the times that, instead of being received with a howl of execration, the book is favorably accepted by so many readers as a true picture of the course of modern thought, and as presenting an ideal of what may possibly become the religion of the future. It is a significant symptom of that drift which is setting in from so many lines of thought, irresistible as that of the stars of heaven, away from orthodoxy and towards Agnostic Christianity.

CHAPTER VIII.

(Continued.)

PART II.

ASSUMING as I do that some form of liberal and reverent Agnosticism is certain to supersede old theological and metaphysical creeds in our conceptions of the universe, it remains to consider how this will practically affect the machinery and outward form of religion, and, what is of more importance, the interests of morality.

In stating the results of my reflections on this subject I am far from wishing to dogmatize, or, like Comte, to build up any positive religion of the future, which, like his, might be comprehensively summed up as "Catholicism without Christianity." I know too well that religions, like other social institutions, are evolved and not manufactured, and that religious rites and institutions only flourish when they are a spontaneous growth. Nevertheless, I think the time has come when the intellectual victory of Agnosticism is so far assured that it behoves thinking men to begin to consider what practical results are likely to follow from it.

The first question is as to the effect on morals. Those who cling to old creeds make great use of the argument that religion is the best of policemen, and that, if faith in a future state of rewards and punishments, as taught by an inspired Bible, were once shaken, all security for life and property would be at an end. This, if it were true, would be no argument, any more than the fact that a nurse may occasionally quiet a naughty child by the threat of a bogey, would prove the existence of a black man with horns and a tail in the cupboard. But it is distinctly untrue. The foundations of morals are fortunately built on solid rock, and not on shifting sand; they are based on ideas and feelings which, in the course of the evolution of the human race, have gradually become instinctive in civilized communities, and passed beyond the sphere of abstract reasonings or speculative criticisms. So far from morality being a thing altogether apart from human nature, and which owes its obligation solely to its being a revelation of God's will, it may be truly said in a great many cases that, as individuals and nations become more sceptical, they become more moral. Thus, for instance, an implicit belief in the inspiration of the Old Testament perverted the moral sense to such an extent that the most monstrous cruelties were inflicted in the name of religion. Mur-

ders, adulteries, witchcraft, religious wars and persecutions, all found their origin and excuse in texts either expressly enjoining them, or showing that they formed part of the character and conduct of men "after Jehovah's own heart." We no longer burn heretics, torture old women, or hew captives in pieces before the Lord. Why? Because we have become sceptical, and no longer believe in the Bible as an infallible record of God's word. When we find anything in it contrary either to the facts of science or to the moral instincts of the age in which we live, we quietly ignore it; and, instead of trying Science and Morality, as our forefathers did, at the bar of Inspiration, we reverse the process and bring Religion before the bar of Reason.

Is the world better or worse for this latest phase of its evolution? Is it more or less tolerant, humane, liberal-minded, charitable, than it was in the ages of superstitious faith? The answer is not doubtful, and it confirms my position that, as a matter of fact, as we have become more sceptical we have become more moral.

If there is one fact more certain than another in the history of evolution, it is that morals have been evolved by the same laws as regulate the development of species. They were no more created, or taught supernaturally, than were the various successive forms of animal and vegetable life. Take, for instance, the simplest case—the abhorrence of murder. It is not an implanted and universal instinct, for even at the present day we find sections of the human race among whom murder is honorable. The Dyak maiden scorns a lover who has not taken a head; the Indian squaw tests a suitor's manhood by the number of scalps in his wigwam, and the more they were taken by stratagem and treachery the more honorable are they esteemed. The priest and prophet of ancient Israel considered it an act of duty towards Jehovah to hew Agag to pieces before the Lord; and Jael was famous among Hebrew women because she drove a nail into the head of the sleeping refugee who had sought shelter within her tent. David, the man after God's own heart, committed the most treacherous and cold-blooded murder in order to screen a foul act of adultery. Where in those cases was either the implanted instinct or the recognition of a divine precept commanding "Thou shalt do no murder"? Millions of Brahmins and Buddhists, who never heard of Moses or of the commandments inscribed on the table of stone at Sinai, have carried the abhorrence of murder to such an extreme as to shrink from destroying even the humblest form of animal life, while millions of savages have killed and eaten strangers and captives without scruple or remorse.

Evidently moral ideas are, like other products of evolution, the result of the interaction of the two factors, heredity and environment, determined in the course of ages by natural selection. They may be seen in the simplest form in the instinct of all social animals, from ants and bees up to man, which makes them abstain from injuring those of the same nest or herd, and prompts them to act together for the common good.

Those who had this instinct strongest would be most likely to survive in the struggle for existence, and each successive generation would tend to fix the instinct more strongly by heredity. What is instinct? In the last analysis it is motion, or tendency to motion, of certain nerve-cells, which have become so fixed, by frequent practice or by heredity, that they become unconscious, and follow necessarily on impulses from without, as in the act of breathing or swallowing. The simpler instincts, as in the case of animals, are the most spontaneous and inevitable. The duckling swims, to the alarm of the mother hen, because it is the descendant of generations of ducks which have taken to the water as their natural element. The sight of water sets up certain motions in the duckling's brain which, by reflex action, impel it to swim.

But, in higher organizations and more complicated instincts, what is inherited is not so much absolute motion as tendency to motion. The almost infinitely complex molecules of the higher brain do not move mechanically, so as to produce a definite result from a definite impulse, but they move more readily in certain directions than in others, those directions being determined partly by the ancestral channels in which they have run for generations, and partly by the action of the surrounding environment. Thus it may be accepted as certain that a child born and educated in England in the nineteenth century will, as a rule, grow up with an instinctive abhorrence of murder; but it is not so certain as that it will breathe and eat. A very violent outward impulse, such as greed or revenge, may overcome the instinct; and if the child had been kidnapped in infancy and brought up among Dyaks or Indians, its notions would probably have been the same as theirs as to the taking of heads or scalps. But, speaking generally of modern civilized societies, there is such an enormous preponderance in favor of the fundamental rules of morality, that with each successive generation the results both of heredity and environment tend more and more to make them instinctive. The lines which Tennyson, the great poet of modern thought, puts into the lips of his Goddess of Wisdom—

“And because right is right, to follow right
Were wisdom in the scorn of consequence”

are becoming more and more every day the instinct, not of higher minds only, but of the mass of the community.

Such a foundation for morals is clearly both more certain and more comprehensive than one based on doubtful revelations. It is more certain, for it does not depend on evidence which, with the progress of science, is fast becoming incredible. The command not to murder is not weakened by proof that the book of unknown origin and date which contains it, gives a totally erroneous account of the creation, and is therefore not inspired; nor does adultery cease to be a crime because the narrative of Noah's deluge is shown to be fabulous. It is also more comprehensive,

for no hard-and-fast written code can long conform to the conditions of an ever-varying society. It will err both by enjoining things which have become obsolete, and by omitting others which have become imperative. Thus the Mosaic code classes sculptors with murderers and thieves, and makes Canova and Thorwaldsen as great offenders against Divine commands as the last criminal who was convicted at the Old Bailey. On the other hand, there is no injunction against slavery or polygamy, but, on the contrary, an implied sanction of them, from the example of the patriarchs who are held up as patterns of holiness. The feeling against slavery is a conspicuous instance of the development of a moral instinct in quite recent times. It is the result of advancing civilization leading to more humane ideas, and to a clearer recognition of the intrinsic sacredness and dignity of every human soul.

In like manner, a multitude of moral ideas have come to be part of our mental furniture which had no place in the early code of the Jews, or even in the more advanced period of early Christianity. The Christian ideal, to a great extent, ignored courage, hardihood, self-reliance, foresight, providence, and all the sterner and harder qualities that make the man, for the softer and more feminine virtues of love, patience, and resignation. The æsthetic side of life also, the recognition and love of all that is beautiful in art and nature, was not only ignored, but to a great extent condemned by it, owing to an exaggerated and one-sided antithesis between the flesh and the spirit.

Among the modern ideas which are fast becoming moral instincts is that of the duty of following truth for its own sake. Doubt is no longer regarded as a crime, but as a duty, when there are real grounds for doubting. We may parody the words of the poet and say—

“And because truth is truth, to follow truth
Were wisdom in the scorn of consequence.”

And this allegiance to truth carries with it the virtue of sincerity. A man must not palter with his convictions, and profess to hold one set of opinions because they are expedient, while he holds others because they are true. If it be a *fact* that the human race has risen by evolution through long ages from palæolithic savagery, he has no right to admit the fact and at the same time profess to believe that he is a fallen creature descended from the Biblical Adam. His duty is to use his reason to ascertain which statement is true, and, having done so, to the best of his ability and without bias or prejudice, to cleave with his whole heart to the truth, and not remain a miserable, half-hearted Mr. Facing-both-ways.

So far, therefore, as morality is concerned, we need not much concern ourselves about the future of religion. Morality can take care of itself, and, with or without theological creeds, it will go on strengthening, widening, and purifying its instinctive holds on the character and conduct of civilized communities. As regards conduct, which is, after all, the

practical test of the goodness or badness of theoretical opinions, a system which can produce a life like that of Darwin is good enough for anything. Conduct is, fortunately, not dependent on creeds, and good men and women can be found plentifully among all classes of belief, from Orthodoxy to Agnosticism. But it cannot, I think, be denied that the leaders of scientific thought, such as Darwin, Herbert Spencer, Lyell, Huxley, and other honored names, have led, on the whole, simple, noble lives, and present characters worthy of imitation. Nor is there any reason to believe that the vast and increasing number of the rank-and-file, who have more or less adopted the views of these great leaders, are in any respect below the average type, or lead worse lives than those who walk in the narrower paths of pre-scientific traditions.

Thus far the Religion of the Future has been comparatively plain sailing. Intellectually, it is clear that evolution has become the mould of thought, and that the lines of Agnostic Christianity and of Agnosticism pure and simple, but recognizing Christianity as one of the forces of evolution, have converged so closely that the difference between them is almost reduced to a name. What Herbert Spencer calls the infinite, eternal energy, which underlies all phenomena, and of whose existence we feel certain, though we can never know or define it, Bishop Temple calls "God." Accurate thinkers may prefer the former definition, for the term "God" has come to be associated with a number of anthropomorphic and other ideas, which imply knowledge of the unknowable; but practically the bishop and the philosopher mean much the same thing, and the converging lines of science and religion approach so nearly that they may be said to coincide. Morally, it is equally clear that there is nothing to fear from such a view of religion, and that the moral instincts are based on something much more permanent and certain than intellectual conceptions or antiquated traditions. But when we come to practical religion there is a great deal comprised in the word which it is not so easy to dispose of.

In the recent controversy between Herbert Spencer and Frederic Harrison the latter reproached the former with offering to the world the mere ghost of a religion. Religion, he says, must be something positive; it must have a "creed, doctrines, temples, priests, teachers, rites, morality, beauty, hope, consolation;" and these, he adds, can be found only in a religion which is intensely anthropomorphic. "You can have no religion without kinship, sympathy, relation of some human kind between the believer, worshipper, servants, and the object of his belief, veneration, and service."

As Mr. Harrison not only admits, but asserts strongly, that science has has upset all existing anthropomorphic creeds and theories, his logical conclusion apparently ought to be that there can be no more any religion. But he escapes from his dilemma by offering us a new religion—Positivism, or the religion according to Comte. For the dethroned Deity of the

Christians, who has been, by the confession of his own theologians, "defecated to a pure transparency," we are to substitute "Humanity," the symbol of the new Divinity being a woman of the age of thirty, with her son in her arms; and Christian worship is to be replaced by an elaborate series of rites and ceremonies, evolved from the inner consciousness of the French philosopher, and which, to the apprehension of an ordinary observer, are for the most part puerile and ridiculous. Thus among the Positivist saints, who are to be canonized in order of merit, Gall, who, in conjunction with Spurzheim, wrote an absolute book on phrenology, gets a week, while Kepler gets only a day; Tasso is assumed to be a seven times greater poet than Goethe, and Mozart a seven times greater musician than Beethoven; while in politics Louis XI., the crafty and sinister French king, depicted by Walter Scott in *Quentin Durward*, is to be worshipped as a seven times greater saint than Washington. Of the only two new forms of positive religion which has been started in my recollection, Positivism and Mormonism, I may be excused if, barring the plurality of wives, I give the preference to the latter, which has, at any rate, proved its vitality by laying hold, not without a certain amount of success, of colonization, temperance, and other problems of practical life. Herbert Spencer had little difficulty in answering this attack. He showed that his definition of the "Unknowable" was very different from the mere negation, or algebraical symbol, which Harrison assumed it to be, and that it was distinctly the assertion of something positive and actually existing, though beyond our faculties. In fact, it is very much the same as Wordsworth's

"Sense sublime,
Of something far more deeply interfused,
Whose dwelling is the light of setting suns,
And the round earth, and in the mind of man."

And if such a feeling can inspire noble poetry, why not a noble religion? The retort was obvious, that, if the Unknowable were too refined an idea on which to base a religion, at any rate it was better than Humanity; for the first is based on a fact, while the second has no foundation but a phrase.

It is an undoubted fact that, when we trace phenomena back to their source, we arrive at a substratum, or first cause, which we cannot understand, or even form any conception of. But what is Humanity? It is but a convenient expression, like gravity or electricity, by which we sum up a number of separate, individual facts, which have certain attributes in common. The only thing real about gravity is, that individual bodies attract one another directly as the mass and inversely as the square of the distance. Annihilate the individual masses, and you cannot anthropomorphize the law of gravity; for instance, following the example of Comte, under the symbol of a heavy woman with a fat child. No more can you individualize and anthropomorphize "Humanity," apart from

the individual human beings, good, bad, and indifferent, of whom the aggregate has been, is, and will be composed. "*Parturiunt Montes*"—the mountains labor to produce a new religion; and the result of Positivism is to make a fetish of a phrase.

At the same time it must be admitted that, while Positivism is no more likely than Mormonism to become the world's religion of the future, the new creed to which we are tending, whether we call it Agnostic Christianity or Christian Agnosticism, places in jeopardy a great deal of what has hitherto been included under the word religion. Mr. Harrison's definition is not an unfair one, that the term includes "creed, doctrines, temples, priests, teachers, rites, morality, beauty, hope, consolation." Of these, the four last may be called spiritual, and the six first practical elements of religion. As regards the spiritual elements, they will remain unaffected, and, in some cases, will be strengthened. Morality, as we have seen, depends on rules of conduct, which have, to a great extent, become instinctive; and it would be strengthened, rather than impaired, by getting rid of the Calvinistic conceptions of a cruel and capricious Deity, condemning untold millions to eternal punishment for the offence of a remote ancestor, and only partially appeased by the sacrifice of his only son. Beauty, again, would certainly gain by getting rid of the idea that all pleasant things are of the domain of the flesh and the devil, and substituting an enlightened æstheticism for a narrow and sordid asceticism. Hope would, as at present, find its field in the possibilities which lie behind the veil, and time, the one great consoler of human sorrows, would still exert its beneficent influence to assuage the poignancy of recent afflictions.

But what will become of the "creed, doctrines, temples, priests, teachers, and rites," which constitute what may be called the machinery or practical side of existing religions? Is the creed the keystone of the fabric, and will it crumble to pieces if this creed ceases to be credible? In other words, if the creeds of Christian Churches, instead of being definite doctrines, as embodied in the Thirty-nine Articles, or the dicta of infallible Popes and Councils, are sublimated into such vague and remote conceptions as enable Huxley to say that the three bishops have conceded all he asks, and Mivart to remain a good Catholic while admitting all the most advanced conclusions of Darwinian science and of Biblical criticisms, can sincere men become Christian priests and officiate in Christian churches?

I judge no one, and can appreciate the reasons which may induce enlightened and excellent men to cleave to old creeds and remain in positions when they feel that they are doing good, as long as it is possible for them to allegorize or explain away accepted doctrines, without feeling that they are consciously insincere. But I confess that it is not easy to understand how this can go even the length it has, and, still more, how it can go further and become general, without degenerating into hypocrisy

and insincerity. Take, for instance, the Apostles' Creed, which, I suppose, contains the *minimum* of doctrine that is generally considered consistent with a profession of Christianity. I can understand how, by an allowable latitude of construction, a Broad Church divine may adopt the first Article and confess a belief in God. But when we come to the subsequent, more precise and definite Articles, which profess a belief in the miraculous conception, birth, and resurrection of Jesus, the carpenter's son of Nazareth, I fail to see how any one can subscribe to them who believes in the permanence of Natural Law and the Darwinian theory of Evolution. Even in the form of Bishop Temple's theory of original impress, as opposed to special acts of supernatural interference, it must be admitted that miracles, if not impossible, are in the highest degree improbable, and that it would require an immense amount of the clearest possible evidence to admit occurrences which are so entirely opposed to all we know of the real facts of the universe, and which, in so many cases, have been shown to be mere delusions of the imaginations. And the slightest acquaintance with Biblical criticism is sufficient to show how weak the evidence really is, and how utterly unfounded the claims of the various books of the Old and New Testament to anything like Divine inspiration. But, if the creeds go, what become of the priests, and, without priests, where are the churches, rites, and ceremonies? And, if these disappear, what an immense gap does it make in the whole framework of existing society! Consider the priests, including in the word all ministers of all denominations. It is easy to denounce priestcraft, and to show by a thousand examples that wherever priests have had power they have done infinite mischief. They have too often been cruel persecutors and narrow-minded bigots; and, even at the best, have been opposed to freedom of thought and progress. But, for all this, the question has another side, and there is a good deal to be said for the existence of a special class, set aside from the ordinary pursuits of life, for spiritual instruction and works of mercy and charity.

In countries like England, where priests have long since ceased to possess any temporal power, and where they live—more and more every day—in an atmosphere of free and liberal thought, there can be no doubt that they are, as a class, much better than they were in former ages. Few exercise an influence actively injurious, many are respectable and harmless, and a considerable number set a good example of virtuous lives, and devote themselves to the promotion of works of charity and benevolence. They have, no doubt, to a considerable extent, lost touch with the masses of population in large towns and industrial centres; and where they have preserved it, chiefly among dissenting congregations, it is too often exerted toward narrowness of views and sectarian prejudices. Still, on the whole, it is exerted for good; and in many rural parishes and poor districts, like the East-end of London, the priest is a powerful factor in organizing charities, visiting the sick, rescuing the fallen, and giving consolation to the

suffering. To take an extreme case, what would a poor parish in the West of Ireland be without its priest? He is the sole centre of civilization in a district of perhaps, twenty square miles; he is not only the spiritual guide of his flock, but, to a great extent, their Education Board and Poor-Law Guardian; he is their friend and adviser in all their difficulties, and, in case of need, their "Village Hampden," who fights their battles with tyrannical landlords, and negotiates the compromises by which they are enabled to retain their humble roofs over their heads. He is worth all the magistrates and policemen put together in repressing crime and preventing outrages. It will be long before a population like that of rural Ireland can dispense with priests.

Again, priests and churches go together; and although church services have to a great extent become a repetition of formulas, and sermons an anachronism, still there is a good deal in institutions which bring people together on one day in the week, cleanly in dress and decorous in behavior, to join in services and listen to discourses which appeal, however faintly and drearily, to higher things than those of ordinary prosaic life. Especially to the female half of the population attendance at church or chapel is, in many cases, a great pleasure, and, if it were only to see and be seen and criticise one another's bonnets, it is a relief from the monotony of life, gives them topics of interest, and promotes a feeling of decency and respectability. Those, therefore, who hold larger views, and feel that they cannot without insincerity subscribe to creeds which to them have become incredible, would do well to be liberal and tolerant towards traditional opinions and traditional practices, and trust with cheerful faith to evolution to bring about gradually such changes of form as may be required to embody changes of spirit.

In the meantime, the course of those who worship Truth above all other considerations is plain. There are abundance of duties clear enough for men of all creeds: the difficulty is to live up to them. But for those who hold the larger views the first duty is to be doubly careful as to conduct. It would be too great a scandal if the larger creed were made the excuse for a looser life. Those who are Darwinians in theory ought to try to be like Darwin in practice: like him, high-minded, modest, gentle, patient, honorable in all relations of life, loving and beloved by friends and family. This, at least, is within the reach of every one, high or low, rich or poor, if not to attain to, at any rate to aim at, as an ideal. Nor do I think that Freethinkers will be wanting in this passive side of conduct. On the contrary, as far as my experience has gone, while more liberal and large-minded, they lead lives quite as good, on the average, as those which are more directly under the traditional influences of religion. But what the Agnostic must beware of is, not to be content with the passive side of virtue, but to cultivate also its active side, and not let himself be surpassed in works of charity and benevolence by those whose intellectual creeds are narrower than his own. There is no doubt that the evangelical

faith in Jesus has been and is a powerful incentive with men like Lord Shaftesbury, General Gordon, Dr. Barnardo, and thousands of other devoted men and women who fight in the foremost ranks against sin and misery. With such as these all men can sympathize; and a more intellectual creed ought to be no obstacle in giving aid and co-operation, but rather an incentive to show that a belief in the truths of science is not inconsistent with active charity and benevolence.

Another point which Agnostics would do well to attend to is to cultivate a love of Nature and Art, so as to keep alive the imaginative and emotional faculties which might wither in the too exclusive atmosphere of pure reason. A prosaic life is a dwarfed and stunted life, which has been more than half a failure; and, as old dogmatic religions fail to supply the spiritual stimulus, it is the more necessary to find it in the wonders of the universe, the beauties of nature, and in communion with great minds through music, painting, and books. These are now brought to a great extent within the reach of every one, and there is no more hopeful symptom of the times than to find that really good books by great authors, when brought out in cheap editions, circulate by the millions. Shilling and even sixpenny editions of Shakespeare, Scott, Carlyle, and other standard authors, are continually brought out, and must be sold in tens of thousands to make them a paying speculation. Who buys them? Certainly not the upper classes, who, in former days, were the only buyers of books. They must circulate widely among the masses, and especially among the more thoughtful members of the working-classes, and the rising generation of all classes who are earnestly seeking to improve their minds and widen their range of sympathies and culture. To read good books rather than silly novels is a practical measure within the reach of every one, and it is supplying, more and more every day, a larger and more liberal education than was ever afforded by theological controversies and conventional sermons.

Another hopeful symptom is to see the growing demand among the working-classes for schools, libraries, museums, music-halls, excursion trains, and all manner of clubs and societies for mutual help, instruction, and amusement. These are the plastic cells multiplying and forming new combinations, out of which, in due time, will be evolved the "priests and temples, the rites and ceremonies," and other institutions requisite to give life and form to the demonstrated truth of the "great Unknowable," and leave the magnificent conception of Darwin and Herbert Spencer no longer the ghost of a religion, but the foundation of a rational, lovable, and, on the whole, happy existence, useful and honorable while its little span of life lasts, and looking forward with hope and manly fortitude to whatever may await it behind that veil which no mortal hand has ever lifted.

CHAPTER VIII.

(Continued.)

PART III.

THE philosophy which I have found work best, both in reconciling intellectual difficulties and as a guide in practical life, is that which I have described elsewhere¹ at some length as "Zoroastrianism," or "Polarity." It amounts to this, that the infinite, eternal, and inconceivable essence of all phenomena, which theologians call God, and philosophers the Unknowable, manifests itself to human apprehension under conditions or categories which are equally certain and equally incomprehensible. We know that it is so, or so appears to us; but we do not know why. Thus Space and Time are fundamental moulds of thought, or, to use the phraseology of Kant, imperative categories. Another of such categories is that of Polarity: no action without reaction, no positive without a negative, no good without evil. In the physical world this is a demonstrated fact. Matter is made of molecules; molecules are made of atoms; atoms are little magnets which link themselves together and form all the complex creations of an ordered cosmos, by virtue of the attractive and repulsive forces which are the results of polarity. Ordered and regular motion also—whether it be of planets round suns, of an oscillating pendulum, or of waves of water, air, or ether, vibrating in rhythmic succession—is a result of the conflict between energy of motion and energy of position.

As Emerson well says in his Essay on Compensation: "Polarity, or action and reaction, we meet in every part of nature: in darkness and light; in heat and cold; in the ebb and flow of waters; in male and female; in the inspiration and expiration of plants and animals; in the undulations of fluids and of sound; in the centrifugal and centripetal gravity; in electricity, galvanism, and chemical affinity. Superinduce magnetism at one end of a needle, the opposite magnetism takes place at the other end. If the South attracts, the North repels. To empty here you must condense there. An inevitable dualism besets nature, so that each thing is a half, and suggests another to make it whole: as spirit, matter; man, woman; odd, even; subjective, objective; in, out; upper, under; motion, rest; yea, nay." This principle, applied to the higher problems of religion and philosophy, leads to results singularly like those which, if we may believe

the sacred books of the Parsees, were taught 3000 years ago by the ancient Bactrian sage, Zoroaster. His religion was one of pure reason. He disclaimed all pretension to found it on miracles, or to define the indefinable by dogmas; but, taking natural laws and human knowledge as his basis, he asserted, in the indetical words used by Emerson thirty centuries later, that an "inevitable dualism besets nature," and embodied the two conflicting principles under the names of Ormuzd and Ahriman. To Ormuzd belong all things that are bright, beautiful, pure, lovely, and of good repute, both in the material and moral universe; to Ahriman all that is foul, ugly, and evil. Apart from certain archaisms of expression and ritual observances which have become obsolete, the Zendavesta might have been compiled to-day from the writings of Herbert Spencer and Huxley. This conception of the universe has this enormous advantage over all those which rest on the idea of an anthropomorphic Creator—that it does not make religion a means of perverting the fundamental instincts of morality, by making an Omnipotent Creator the conscious author of evil. This is a dilemma from which no anthropomorphic form of religion can escape: either its God is not omnipotent, or He is not benevolent. Sins and suffering are *facts*, as much as virtue and happiness; and if the good half of creation argues for a good Creator, it is an irresistible inference that the bad half argues for one who is evil.

Theologians, in attempting to escape from this dilemma, have been only too apt to confuse the instincts of morality, by arguing that actions which would be cruel, unjust, and even devilish, in the case of a human despot, become merciful and righteous if done by an Almighty Ruler in Heaven. Such a dogma is, to all intents and purposes, devil-worship, and degrades man into a slave crouching under the lash of a harsh master. How infinitely superior was the ideal of the old Roman poet of the "*justum et tenacem propositi virum*"; the upright and firm-minded man, whom no threats of a frenzied mob or raging tyrant could shake from his purpose, or induce to palter with his convictions; nay, not even though the earth and sky fell in ruins about his head, could the convulsion of nature daunt his steadfast soul.

"Victrix causa Deis placuit sed victa Catoni."

But with a Polar theory of existence, the difficulty is relegated to the realm of the unknown, and instead of sinking with Cowper into the despairing depths of religious madness, we may hold with Wordsworth—

"The cheerful faith that all which we behold
Is full of blessings."

A serene and cheerful faith is, of itself, one of the greatest blessings, and it is specially needed in an age in which so many gospels of pessimism are abroad, and so many failures in the struggle for existence tell us that society is a sham, civilization an imposture and life a mistake.

Another advantage of this Polar theory of the universe is that it teaches us to take a large and tolerant view of men and of events. The true charity which "suffereth long and is kind" is scarcely compatible with a bigoted and one-sided adherence to a particular set of opinions. Whether in politics or in religion, if we believe that all those who differ from us have a double dose of original sin, we can scarcely comprehend or love them. Good natures may pity them, bad natures hate them, conscientious natures feel it a duty to stamp them out; but we can never really feel towards them as brothers and sisters, who have gone "a kening wrang," and been drawn a little too far by the attraction of the opposite polarity to that under the influence of which we ourselves live and have our being. Thus, in politics, the cosmos of an ordered society can only be maintained, as in the orbit of a planet, by a due balance between the centripetal and centrifugal forces. If we were all Conservatives, society would condense into a sluggish and inert mass; if all Radicals, it would be apt to fly off into space. Evolution will surely bring about in their appropriate time the results which are fittest to survive. Why quarrel, then, and entertain hard and bitter thoughts, because our own individual atom is acting in one direction, while that of our neighbor is acting in another? Act strenuously in that direction which, after conscientious inquiry, seems to be the best; do the duty which lies most nearly and plainly to our hands; and trust to what religious men call Providence, and scientific men Evolution, for the result.

A large-minded and large-hearted creed is the more needful, as the weak part in the otherwise admirable British nature is a tendency to that peculiar form of narrowness which is commonly called Philistinism. Why the Philistine, or dweller in the land of palms on the border of the Mediterranean, should have been taken as the type of straight-laced and narrow-minded conventionality, is hard to see. But the fact is there, and the word expresses it; and it is beyond doubt that there is a great deal of truth in Matthew Arnold's indignant diatribes, and that the average well-meaning and respectable citizen is apt to be an awful Philistine. It is not confined to classes; in fact, there is probably more of it in the upper and middle classes than among workmen. But whether it be the cut of a coat, or of a creed, and whether going to a court or to a chapel, the essence of the thing is the same—viz., that some class or coterie fences itself in behind some narrow conventionality, and ignores the great outer world. If the pale be one of fashion, those not within it are outsiders, cads, commoners; if of religion, they are sons of perdition. To the narrow-minded Tory all Irish are dynamiters, all Radicals rebels, and Gladstone is Antichrist. To the narrow-minded Radical all landlords are robbers and all parsons hypocrites. Socialists seek to regenerate society by abolishing capital; capitalists to save it by ignoring that property has duties as well as rights. It is all Philistinism, and incapacity to see that there are two sides to every question, and that one thing only is certain,

that falsehood lies in extremes. Half the difficulties which perplex us would disappear if we could enlarge our minds, so as, in the words of Burns—

"To see ourselves as others see us; "

and to act on the precept of the wise old Rabbi Hillel, now 1900 years old: "Never to judge another man till you have stood in his shoes."

Another advantage of this Polar philosophy is that it enables us more readily to assimilate with those who hold different forms of belief. What matters it whether the Parsee embodies his good principle in an Ormuzd, the Christian in a Jesus, the Stoic in a Marcus Aurelius, or the philosopher finds no need for any personification at all? The essential thing is that they are all soldiers fighting together in the cause of goodness and light, against evil and darkness. Practically, a great many modern Christians are Zoroastrians, with Jesus for their Ormuzd. They care little for dogmas, except as exalting the character of the object of their veneration, and giving expression to their transcendental love and adoration for his person and character. Listen to the simple preaching of the Salvation Army, and you will find how exclusively it turns upon the one element of the love of Jesus. You would never discover that Christianity had been identified with mysterious dogmas and metaphysical puzzles, and that salvation depended on holding the Catholic faith as defined by St. Athanasius. But sinners are exhorted to give up drink and evil ways for the love of the dear Redeemer who died for them; and if this touches simple natures, and if calling themselves soldiers, marching in ranks, and beating drums, aid in the work, why should any one object to it? We are nearer to these simple souls than we are to the divines who beat the drum ecclesiastic, and tell us from pulpits, that, unless we believe all the articles of the Catholic faith without doubt we shall perish everlastingly.

To sum up, the duty of a man of the nineteenth century is clear. He has to follow truth at all hazards. Questions of the highest importance have been raised, which he cannot shirk without narrowing his whole nature, and shutting himself up in an ever-contracting circle of ignorance and prejudice. There are two theories of the universe and two of man, which are in direct conflict. Of the universe, one, the theological, that it was created and is upheld by miracles—that is, by a succession of secondary supernatural interferences by a Being who is a magnified man, acting from motives and with an intelligence which, however transcendental, are essentially human; the other, the scientific, that is the result of original impress, or of evolution acting by natural laws on a basis of the Unknowable. In like manner, of man, one theory, the theological, is that he is descended from the Biblical Adam, created quite recently in a state of high moral perfection, from which he fell by an act of disobedience entailing on his descendants the curse of sin and death, from which a portion were redeemed by the sacrifice of the Creator's own son, incarnate in

Jesus of Nazareth; the other, the scientific theory, that man is a product of Evolution from palæolithic ancestors, who lived for innumerable ages in a state of savagery, but always gradually progressing upwards in arts and civilization.

Both theories cannot be true; they are in direct contradiction upon fundamental facts, which are a question of evidence. The evidence for the theological theory is based entirely on the assumption that the Bible is an inspired record of Divine truth, attested by miracles. The scientific theory rests on the evidence of a vast and ever-accumulating mass of facts, which admit of no doubt or contradiction. It seems to me that an unlearned man need not go farther than to contrast the theories of man's descent. Let him go to the British Museum and look at the implements of flint and bone which have been found in conjunction with remains of extinct animals, in caves and river gravels of immense antiquity. How can the theological theory hold water, unless it could be proved that these, and the hundreds of thousands of similar human remains, including skulls and skeletons, which have been discovered in similar deposits over the four quarters of the earth, were placed there by a conspiracy of scientific men, who wished to discredit the Bible? Even the Duke of Argyll, who has conspiracy on the brain, would hardly contend for such a conclusion, or maintain that the narrative of Noah's deluge gives a *true* account of the manner in which animal life has been diffused over the different zoological provinces in which it is actually divided.

The more he extends his researches and enlarges his knowledge, the more will every honest and conscientious inquirer find that the scientific theory is victorious along the whole line. If he is a lover of truth, therefore, he will find himself constrained to adopt the larger creed. But, in doing so, let him show that it is not merely a speculative creed or intellectual deduction; but that the larger creed leads to a larger life; that it makes him more liberal and tolerant, more pure and upright, more loving and unselfish, more strenuous, as becomes a soldier fighting in the foremost ranks in the campaign against sin and misery; so that, when the last day comes which comes to all, it may be recorded of him that his individual atom of existence left the world, on the whole, a little better, rather than a little worse, than he found it.

CHAPTER IX.

THE HISTORICAL ELEMENT IN THE GOSPELS.

PROFESSOR Huxley in a recent article in the *Nineteenth Century* refers to the great difficulty he has felt in his efforts to define "the grand figure of Jesus as it lies in the primary strata of Christian literature. What did he really say and do? and how much that is attributed to him in speech and action is the embroidery of the various parties into which his followers tended to split themselves within twenty years after his death, when even the threefold tradition was only nascent?"

I have felt the same difficulty myself, and after reading a mass of critical literature, both English and German, I must confess to having found myself more than ever perplexed. In English Biblical criticism the tone is almost invariably that of advocate rather than of judges. The opponents of Orthodoxy insist too much on finding arguments against inspiration in every text, while its supporters are almost invariably guilty of the fallacy which is known to logicians as the *petitio principii*, and begin by assuming the very points which they profess to prove. Thus Dr. Wace, in his reply to Huxley, starts with the assumption that the Sermon on the Mount and the Lord's Prayer prove the divinity of Jesus and the inspiration of the Gospels; and this being proved, it follows that we must believe everything we find recorded in these Gospels as true, down even to the miracle of the Gadarene swine, under pain of making Jesus out to be a liar. Of course we must, if we admit the theory of divine inspiration, but this is the very point to be proved. How does Dr. Wace attempt to prove it? By lengthened arguments to show that the omission of all mention of the Sermon on the Mount and Lord's Prayer by Mark is not a fatal objection; that the Synoptic Gospels, or parts of them, were probably written not later than from 70 to 75 A.D., and other doubtful points of really very little importance. But he totally ignores what is the real difficulty in the way of accepting his fundamental axiom that the Sermon on the Mount and Lord's Prayer compel us to admit inspiration. The difficulty is this, that their precepts, admirable as they are, are not original. There is scarcely one which is not to be found, identical in substance and often almost in the exact words, in the older writings of earlier religions and philosophies. Thus the cardinal precepts, such as to "love your neighbor as yourself," to "do as you would be done by," to

"return good for evil," &c., are found in the old Egyptian ritual, the Vedic literature, the maxims of Confucius, and still more conspicuously in the oldest writings of the Buddhist and Zoroastrian religions.

And what is even more important, the Talmudic or Rabbinical literature of the age immediately preceding that of Jesus is full of them; the writings of Jesus the Son of Sirach, of Hillel, and of Philo, contain many of the same precepts, almost verbatim, and they were the common possession of the Jewish world at the time when the Sermon on the Mount is supposed to have been preached.

These facts are undeniable, and it is equally undeniable that, if so, the bottom is knocked out of Dr. Wace's assumption; for if these precepts and this code of morality could be evolved in other ages and countries by natural means, why should they require the miracle of Divine Inspiration to account for them in the New Testament? The Sermon no doubt has its value in bringing to a focus a number of excellent precepts, and helping to form the ideal of Jesus and his teaching, which has become the fundamental fact of Christianity, but as anything like reasonable proof of miraculous inspiration it is worthless. Nor is there anything in the Lord's Prayer which might not have been the prayer of any pious Jew of the time, or, for the matter of that, of any pious Gentile, for "Our Father which art in heaven" is a literal translation of Jupiter, or Dyaus-piter, the father of gods and men identified with the vault of the sky. And it cannot be reasonably denied that the omission of all mention of it in Mark tells strongly against its authenticity, for, if really taught by Jesus, it would have been the very thing to be committed to memory, and taught to all converts by his immediate disciples.

I refer to this argument of Dr. Wace's to illustrate what I find to be the great fault of English theologians, viz., that they shirk the obvious difficulties which present themselves to the minds of ordinary men using their reasoning faculties, and either refuse to reason and appeal to faith, or battle about minor points which hardly touch the real objections.

When I turned to German criticism I found it less obscured by theological, but more by theoretical prepossessions. Every professor had his own theory to establish, and that of his predecessors to demolish, and in doing so applied an enormous amount of erudition to points which, for the most part, seemed to me to remain doubtful, or to be of minor importance. The effect produced on my mind by critics such as Strauss, Baur, Volckmer, and Reuss was to leave a sort of blurred and hazy image, as of a landscape in which the essential features are lost in the multitude of details.

For instance, it seemed to me that the enormous mass of literature which has been written to assign the precise date of each Gospel, their respective priorities, how many successive editions they went through, and how far each copied from the others or from older manuscripts, might have been greatly abridged if the learned authors had been content

to take the simple, straightforward evidence of the earliest Christian writer who gives any account of their origin, viz., Papias.

Papias was Bishop of Hieropolis, one of the churches in Asia Minor, which was reputed to have been founded by St. John, and who suffered martyrdom for his faith when an aged man, about 160 A.D. He was certainly in a position to know what was accepted as of authority by the early Christian Church of his period. He had been in close personal communication with Polycarp and others of the generation preceding his own, who had been themselves disciples of the apostles, and his information was therefore only removed by one degree from being that of a contemporary and eye-witness. His work is unfortunately lost, but Eusebius, who was a great collector of information respecting the Gospels in the fourth century, happily preserves the most important part of it in a long quotation.

What does Papias say? Practically this—that he preferred oral tradition to written documents, of which he expresses a somewhat contemptuous opinion, assigning as a reason that there were only two written records which possessed any real authority: one a collection of anecdotes or reminiscences, taken down without method or order from the mouth of St. Peter by Mark, his interpreter; the other a collection of logia, or sayings of Jesus, written by St. Matthew in Hebrew, and badly translated into Greek by various writers.

This statement of Papias, if correct, proves several things:—

1. The Gospel of St. John could not have been known to Papias, or he, a bishop of a church reputed to have been founded by that apostle and a friend of Polycarp and others who had known him personally, could never have expressed an almost contemptuous preference for oral tradition over any written records, and made no mention of what has been always considered the most important and spiritual of all the Gospels, proceeding direct from the Apostle whom Jesus loved.

2. The same remark applies to the Gospel and Acts of St. Luke, which contain by far the most precise details of the crowning miracles of the Resurrection and Ascension.

3. It is equally clear that he could not have known the Gospels of Mark and Matthew as they now exist, for they are connected biographies of the life and teachings of Jesus, and not fragmentary anecdotes and sayings such as Papias describes.

4. It is evident, however, that two written records—one attributed to Mark and the other to Matthew—were known in the time of Papias, and received as of sufficient authority to make him refer to them in his general depreciation of written as compared with oral testimony.

This is a perfectly clear and intelligible statement, made apparently in good faith, without any dogmatic or other prepossession; and it is confirmed by all the evidence we possess of this obscure period—whether it be the external evidence that the Gospels in their present form are not

quoted or referred to as an authority by any Christian writer earlier than the second century, or the internal evidence derived from the Gospels themselves. That of Mark has exactly the appearance of having been compiled into a biography from a series of such reminiscences as Papias describes. It is full of little life-like touches which have no special significance, but seem to have come from the recollection of an eye-witness. For instance, that the throng was so great to hear Jesus that not only the room but the doorway were crowded, and that the hurry and bustle were such that they had not time even to eat.

It is true that such touches are not conclusive, and may have been added to give local color and a life-like character to the narrative, a remarkable instance of which is afforded by the episode of the woman taken in adultery, in St. John, which is not found in the oldest manuscripts, and is doubtless an interpolation. This episode has every appearance of being taken from the life; the abstracted air, the writing with the finger on the sand, the exact words spoken, all give it an air of reality, and yet it must have been interpolated at a comparatively late date after several manuscripts of the Gospel were already in existence. Such an instance may make us hesitate in judging of similar passages from internal evidence, but it hardly applies to Mark, whose characteristic traits are much shorter and simpler, and whose level of culture and literary ability is much lower than that of the compiler—whoever he may have been—of the Gospel according to St. John.

The Gospel of Matthew, again, has exactly the appearance of having been compiled from such a collection of logia as Papias describes, woven into a biography by the aid of the original Mark and other early traditions, and embellished by the addition of much mythical matter intended to show the fulfillment of Messianic prophecies, and to meet objections.

It has always seemed to me, therefore, that all theories as to the date and origin of the Canonical Gospels were comparatively worthless which did not take into account the fundamental fact of this statement of Papias. It is either true or false. If true it is worth a hundred theories evolved, like the ideal camel, from the inner consciousness of German professors, and is conclusive of the fact that the Gospels in their present form were not known, or not accepted as an authority, by the early Christian Churches of the East in the first half of the second century, though this is quite consistent with their containing passages and traditions which may date back to the siege of Jerusalem, or even to a much earlier period. If, on the other hand, Papias is to be rejected, let us know the reason why, and give us some sort of an intelligible explanation of how such a passage came to be quoted from his work by Eusebius.¹

¹ The difference to which I have referred between the conclusions of common-sense and those of erudite ingenuity acting under the influence of theological prepossession, is well illustrated by the attempt of Bishop Lightfoot, in his *Essays on Supernatural Religion*, to answer the obvious inference from this passage of Papias. Common sense says,

I give this as an illustration of the way in which the more I studied these professional works of Biblical criticism, the more confusion became worse confounded. At length, after having abandoned the subject for a time, I resolved, almost in despair, to see what conclusion I could form for myself by the application of common sense and the ordinary rules of evidence. I succeeded thus in forming a tolerably clear and consistent view of what might be the real historical element in the origin of Christianity, and the personality of its Founder. I do not pretend to impose on others my own solution of this extremely difficult and obscure question, but I think it may perhaps aid some sincere inquirers in giving clearness and precision to their ideas, and defining the boundaries between what may be accepted by the ordinary rules of reason, and that which lies outside the province of reason, and can only be accepted as an article of faith.

To begin with, I believe that miracles lie entirely within the domain of the Canonical Gospels, and especially that of St. John, had been extant in their present form and accepted as an authority by the early Christian Church, Papias must have known them. If he had known them he could not have referred in such contemptuous terms to written records as inferior to oral tradition, and could not have mentioned the disconnected anecdotes of Mark and the Hebrew logia of Matthew as the only records of importance. Nor could Eusebius have quoted this passage alone from Papias, which obviously tells against his own views, without quoting other passages which refer to the Canonical Gospels, if any such had existed in other portions of the work of Papias. The Bishop replies—

1. That the design of Eusebius may have been to quote only references to the Apocryphal writings, and in the case of the Canonical Gospels anything which threw light on their origin; and therefore that the silence of Eusebius is no proof that there may not have been references to and quotations from these Gospels in the writings of Papias.

But this, which is in itself a very far-fetched supposition, is contradicted by the words of Eusebius himself, who says, "As my history proceeds, I will take care to indicate what Church writers from time to time have made use of any of the disputed books, and what has been said by them concerning the *Canonical and acknowledged Scriptures*."

2. That when Papias says, "I thought I could not derive so much advantage from books as from the living and abiding oral tradition," he meant books which were not Gospels, but commentaries on Gospels.

Here again this far-fetched supposition is contradicted by Papias himself, who says "books" without any qualification, and refers to written records, viz., the notes of Mark and the logia of Matthew, which assuredly were not commentaries or interpretations of existing Gospels, but historical records of the sayings and doings of the Founder of the religion as much as the Canonical Gospels themselves; or rather they were the primary matter and first forms of the Synoptic Gospels, and could not have been so referred to, if the Gospels, in their more complete and elaborate form, and especially that according to St. John, had been known to Papias and received as authorities.

The closer the connection is drawn between Papias and the Apostle John through Polycarp, and the Bishop insists greatly on this in his *Essays*, the more impossible does it become that, if Papias had known of such a Gospel as is attributed to John, he could have written such a sentence as is quoted from his lost works by Eusebius, saying that he could get "little profit from books," and have referred, as he does, to Matthew and Mark, without saying a word of John, or of the Gospel which is pre-eminently the foundation-stone of Christian theology.

of faith. I mean real miracles, for a large number of those narrated by the Gospels may well be natural occurrences described in the language of the day. For instance, casting out devils, faith-healing, or curing paralytic affections of the nerve or will by a strong impulse; and the effects of religious excitement, the sympathy of crowds, dreams, visions and hallucinations, are all well-known causes at the present day, of effects which in former ages would undoubtedly have been considered as miraculous. These may very well have actually occurred, and be as historical as any other part of the narrative.

But when we come to such miracles as raising the dead, or permanently curing organic diseases, they require a special supernatural interference with the laws of nature. Now what does reason say to such miracles? It tells us that in thousands of such cases of alleged miracles, both in Pagan, early Christian, and mediæval ages, once firmly believed in and attested by what seems strong contemporary evidence, not one now holds the field and is seriously accepted, with the possible exception of some half-dozen, which are accepted solely on the authority of the New Testament.

Take, as an illustration, the statement that one who was really dead returned to life. There are some thousand millions of people living in the world who are renewed by death and birth at least three times in every century, and this has been going on for some fifty centuries. That makes some 15,000,000,000 human beings who have died, and of whom it may be said with certainty that not one has ever returned in the body to life. You wish to establish some five or six exceptions to this rule, or rather one, for if the return to life of Jesus cannot be proved, few would be disposed to rest their faith in miracles on any other of the alleged cases of resurrection. And the historical truth of the appearances of a living and tangible Jesus after death hinges mainly on the account of the Ascension given by St. Luke in the Acts of the Apostles. This is the crowning miracle of all, the appropriate conclusion of his mission on earth, and strongest proof of his Divine nature; and it is described in the fullest detail as having occurred in the presence of a large number of witnesses. St. Paul says of this, or of some other appearance not recorded in any of the Gospels, five hundred witnesses, many of whom remained alive till his day, and in a definite and well-known locality close to the large city of Jerusalem. If the evidence for this miracle fails us, how can we believe in others more obscure and less well authenticated?

Surely the evidence for an event which is a solitary exception to 15,000,000,000 experiences, requires to be proved by testimony far stronger than would be required to prove an ordinary occurrence. But how stands the evidence for the miracle of the Ascension? Of the four witnesses called into court, one, Mark, the oldest of all, and probably deriving his information direct from St. Peter, makes no mention whatever (if we omit the last verses, which are an obvious addendum, and, as

the authors of the revised edition tell us, are not found in the oldest manuscripts) of the Ascension, or of any other supernatural event connected with the Resurrection. Matthew says distinctly that the message sent by Jesus to his apostles was to "depart into Galilee," and that they went there accordingly, where they saw him, but "some doubted," and makes no reference to any Ascension. John describes certain miracles occurring at Jerusalem, but places the concluding scene of the Resurrection, when Jesus took his final farewell of his disciples, in Galilee, and, like Mark and Matthew, makes no mention of any Ascension.

Observe that Luke says distinctly that Jesus charged the apostles "not to depart from Jerusalem," and that all the miraculous appearances, including the Ascension, occurred there. There cannot be a more flagrant contradiction than that between Matthew and Luke. Consider now what would be the chance of establishing, not a stupendous miracle, but such a commonplace event as the signature of a will, if the first witness called was a solicitor who said that the testator in his last illness asked him to remain in London to draw and attest his will, which he did, while the second witness was another solicitor, who swore that the testator told him he was going down to his place in Yorkshire on the chance that the air of the country might revive him, and asked the witness to follow him there by the next day's train, in order to complete his will, which instructions he accordingly carried out. And let any candid and dispassionate person say how, if tried by the ordinary rules of reason, this differs from the direct contradiction between Matthew and Luke.

With this conclusive proof of the impossibility of establishing the greatest of all miracles by the ordinary rules of evidence, it is almost superfluous to refer to the many other circumstances which, on the showing of the Gospels themselves, lead to the same result. For instance, the next greatest miracle to those of the Resurrection, the raising of Lazarus, is related only in one Gospel, and that the latest and least authentic; while if it really occurred, it must have been known to and recorded by the three other evangelists. Or what can be said of the admission that even the minor miracles of casting out devils and faith-healing depended on faith, and could not be performed in the sceptical atmosphere of Nazareth, where Jesus and his family and surroundings were well known; or of the refusal of Jesus to comply with the perfectly reasonable request of the Pharisees to prove His Messiahship by a sign from heaven, a refusal which, if He possessed the power, was unfair to men who, if narrow and fanatical, were doubtless many of them sincere and zealous for their country and religion.

I do not see how it can be doubted that the evidence for many early Christian and mediæval miracles, which no one any longer believes, is much stronger than those of the Gospels. St. Augustine, a perfectly historical and leading personage of his day, testifies that in his own time, and in his own bishopric of Hippo, upwards of seventy miracles, had

been wrought by the relics of St. Stephen. The friend and biographer of St. Ambrose relates numerous miracles, one a resurrection from the dead, which had been notoriously wrought at Milan by the saint during his life-time. Eginhard, the secretary of Charlemagne, who was a well-known historical character, relates, as from his own experience, a number of miracles wrought by the relics of two Christian martyrs which an emissary of his had purloined from Rome, and which he was transporting to Heiligenstadt. To come to later times, St. Thomas-à-Becket was as well known an historical character as King Henry, but no miracles were attributed to him in his life-time; but after his murder, under circumstances causing universal horror and excitement, a whole crop of miracles sprung up about his shrine at Canterbury. Any one who will consult the authorities cited by Freeman will be astonished to find how very precise and circumstantial is the evidence for many of these miracles. One instance is that of the attestation of the mayor and several burgesses of a Northern borough, to the fact that a fellow-townsmen of theirs, blind from his youth, had gone to the shrine and returned with perfect sight. There is nothing in the account of any miracle in the New Testament at all approaching this in what constitutes the force of evidence, precision of date, place, persons, and circumstance. And yet for millions who believe on the weaker evidence, there is scarcely one who retains any belief in such miracles as those related of St. Thomas-à-Becket.

The reason is obvious; miracles are in a totally distinct province, that of faith. What is faith? St. Paul tells us it is "the assurance of things hoped for, the proving of things not seen." Hardly of "things not seen," for in that case, mathematicians and chemists who believe in atoms and molecules would, of all men, have the largest faith. But say of "things not proven," and it is a very accurate definition. There can be no doubt that there are men, often of great piety and excellence, who have, or fancy they have, a sort of sixth sense, or as Cardinal Newman calls it, an "illative sense," by which they see by intuition, and arrive at a fervid conviction of the truth of things unprovable or disprovable by ordinary reason. The existence of a personal God, the divinity of Christ, the inspiration of the Bible, and consequent reality of miracles, appear to them to be fundamental and necessary truths beyond the scope of reason. They feel that if their belief in these were shaken their whole life would be shattered, and they would lose what Wordsworth says Nature was to him—

"The anchor of my purest thoughts, the nurse,
The guide, the guardian of my heart, and soul
Of all my moral being."

With such men I have no quarrel. Let them hold to their faith, and leave reason to poor ordinary mortals, who, like myself, have no such transcendental intuitions. Only do not let them confound the two provinces, and try to ride on two horses at the same time. Faith is either a

delusion, or something, which is above and beyond reason. If the latter, they only weaken it by seeking to prop it up by weak and sophistical arguments. If, for instance, a man tells me that he believes in the miracle of the Ascension by faith, I have no more to say; but if he proceeds to back up his assertion by arguing that there is no contradiction between Luke's account of it and that of the other evangelists, I say, "This man is either insincere or illogical." His motto is, "Believe if you can; if you can't, Cant."

I do not, therefore, so much deny the truth of the Christian miracles as affirm that they are altogether outside of the province of reason, and have no place in such an historical *resumé* as I am attempting to give in this essay.

Another reservation I have to make, that if the historical element in the life of Jesus may seem to be reduced to very slender proportions, this does not necessarily affect the vital truth of the Christian religion. This religion has always been to a considerable extent, and is becoming more and more every day, not so much a question of external evidence or of dogma, as of a sincere love and reverence for the ideal which has come to be associated with the name of Jesus. This ideal is a *fact*, and has long been, and will continue to be, an important factor in the progress of human evolution from lower to higher things. How the ideal grew up and came to be established is of far less importance than what it is. Love, charity, purity, compassion, self-sacrifice are not the less virtues because the ideas and emotions of so many good men and women, for nineteen centuries, have taken form and crystallized about a comparatively small nucleus of historical fact.

My meaning will be best explained by an illustration. In Catholic countries there is a figure which competes with, if indeed it do not often supersede, that of Jesus—the figure of the Virgin Mary. Now here we can trace the historical nucleus down to a *minimum*. What do we really know of the mother of Jesus as an historical fact? That she was a Jewish matron, the wife of a mechanic in a small provincial town, the mother of a large family, for four brothers of Jesus are mentioned as well as sisters. Apart from the legends of the Nativity, which are obviously mythical, nothing else is known of her, except that she was probably one of the sceptical friends and kindred at Nazareth whose want of faith prevented the working of miracles there, and whose impression seems to have been that Jesus was not altogether in his right mind. Her relations with her Son do not appear to have been very cordial, from his refusal to go out to her when she came to the door asking to see him, and his emphatic assertion that those who believed in him were dearer to him than his blood relations.

The only other mention of Mary by St. John, who describes her as sitting at the foot of the Cross, is apocryphal, being directly contradicted by the very precise statement in the three other Gospels, that the Mary

who was present on that occasion was a different woman, the mother of Salomé. The motive of this introduction of Mary, the mother of Jesus, by the author of the fourth Gospel is obvious, viz., to exalt the character of St. John, as is apparent throughout this Gospel, in which the "Boanerges," the violent and narrow-minded John of the other Gospels, is converted into the gentle and amiable apostle whom Jesus loved.

What is the sort of figure which, if we relied on historical evidence only, we should draw from these scanty records? That of a plain, motherly Jewish woman, who did her own scrubbing and washing, and was probably too much oppressed by household cares, and those of a large family, to know or care much for the spiritual aspirations and prophetic pretensions of her eldest son.

And yet from this homely figure what a world of beautiful ideas and associations have flowered into life. The Madonna has become an embodiment of all female virtues carried to a point where they become divine. Love, purity, innocence, maternal affection, human suffering, have all found their highest ideal in the "Mother of God," the "mild and merciful Madonna," the "Blessed Virgin." Do you tell me this is not a fact because it is not based on historical evidence? I tell you it is a *fact*, far more certain and more important than nine-tenths of the events related in history. If you doubt it, look at Raffaele's *Madonna di San Sisto*, or Murillo's *Immaculate Conception*; or listen to Mozart's *Ave Maria*, or Rossini's *Stabat Mater*, and you will see that this ideal worship of the carpenter's wife of Nazareth has produced works which will remain for ever as high-water marks which have been reached in the evolution of modern art. You will say with Byron—

"Ave Maria, oh, that face so fair,
Those downcast eyes beneath the Almighty dove.
Ave Maria, may our spirits dare
Soar up to thee and to thy son above."

And so of Jesus; the historical figure, though a good deal more certain and definite than that of his mother, is but a small matter compared with the ideal which has grown up in the course of ages about it. It is but as the fragment which, dropping into a saturated solution, attracts molecule after molecule, until it grows into a large and lovely crystal which all eyes admire.

With these reservations, which may go some way to mitigate the scruples of orthodox readers, if I should happen to have any, viz., that miracles are a question of faith, and that the historical element does not materially affect the vital truth of Christianity, I fall back on my own humble province of reason, and attempt to show what can be gathered by it from the earliest records as to the personality and teaching of Jesus.

I begin by stating the two principles by which I have been mainly guided in the research. The first is what I call the "Minimum of Miracle." Of different biographies of the same person, that which con-

tains the fewest miraculous legends is almost certain to be the earliest and most authentic. It is far more likely that such legends should be added or invented than that, if they actually occurred, or were generally accredited, they should be designedly omitted. As an illustration of what I mean by this, take the case already referred to of St. Thomas-à-Becket. If newspapers had existed in his time which published a biography of eminent men on the day after their death, such a biography would have contained no miracles; one written a few weeks later would have doubtless contained some reference to the miraculous vision of the monk who watched by his remains, and some of the miracles said to have occurred at his shrine; while still later accounts would have multiplied the miracles into scores and hundreds. There can be no doubt here that the succession in point of time would have been, no miracles, few miracles, many miracles. And the same holds good of all biographies of eminent men, saints, and martyrs. The outlines of their historical figures are almost lost in the accumulation of myths and legends, which in uncritical times have grown up about them.

The second even more important principle is, that admissions of events and sayings which tell against the point of view of the writer, are far more likely to be historical, than those which have the appearance of being introduced to show the fulfillment of prophecies, to answer objections, or to support dogmatic views. Thus if Jesus is described as being born and bred at Nazareth, the son of a carpenter whose family and surroundings were well known there, the statement is far more likely to be true than one which describes him as having been born at Bethlehem, and attributes to him a whole series of marvellous and miraculous incidents.

Tried by both these tests, the Gospel of Mark has every appearance of being the earliest and most authentic record, and when this is confirmed by the clear and explicit statement of Papias, I have no hesitation in assuming it to be the surest basis of our historical knowledge, and in all probability mainly derived from the reminiscences of Peter himself, or of other contemporary witnesses of the events described.

Starting from this basis, I assume, as beyond all doubt, that Jesus was an historical personage. There is nothing in Mark which would lead to the supposition that any considerable portion of his Gospel was legend or myth. The time is too modern, and the narrative too precise, to allow us to suppose that the whole story had been elaborated by later theologians from Oriental myths and Messianic prophecies. The age was long past when religions could originate in solar myths and misunderstood personifications of natural phenomena. Every great religious movement which comes fairly within the historical period, from Buddha and Zoroaster down to Mahomet, had some real personality as its starting-point, about whom myths and dogmas accumulated, until almost obscuring the historical nucleus. So also was doubtless the case with Jesus.

The next point I consider to be quite certain is, that he was born of

humble parents at the little town of Nazareth in Galilee. The legends of the Nativity and Infancy may all be dismissed as purely mythical. The two accounts and genealogies in Matthew and Luke do not agree, and are each hopelessly inconsistent with the evidence of the other Gospels. It is plain that during his life and afterwards Jesus was supposed to have been born at Nazareth, that this was cast in his teeth as being irreconcilable with any claim to be the Messiah, and that neither he nor his apostles ever attempted to deny it, or made any claim to his having been born at Bethlehem. If such a series of startling events as are described by Matthew had really occurred, the inhabitants of Nazareth could hardly have ignored his claims as a prophet on the ground that he was a mere ordinary fellow townsman, "the Son of the carpenter, whose brothers and sisters are with us every day."

The accounts of the Nativity, Infancy, and early Manhood of Jesus may be dismissed as purely legendary. I do not say so merely because they contain so many miracles, but on the ordinary grounds of historical criticism. In the first place, the two accounts of Matthew and Luke are contradictory. The second admits that Nazareth was the abode of Joseph and Mary, and accounts for the birth of Jesus at Bethlehem by the supposed necessity of Joseph's going there to be taxed, as being of the family of David; while the first assumes that Bethlehem was the abode of the parents, and says that they only went to Nazareth some years later from fear of Archelaus, who had succeeded to his father Herod. Matthew describes the Massacre of the Innocents at Bethlehem, and says that Jesus escaped it by flying into Egypt; while Luke omits all mention of the massacre, the miraculous star and the wise men of the East, and says that the parents took the babe straight to Jerusalem. In both cases all the events are described as happening in fulfillment of prophecies. The other two evangelists, Mark and John, make no mention of any such occurrences, and begin their biographies with the visit of Jesus, when a grown-up man to John the Baptist.

But the most conclusive fact is that these legends are identical, both in their general tenor and in many minute details, with similar legends of earlier religions. Thus the miraculous birth from a virgin is related of Horus, of Krishna, of Buddha, and of many of the celebrated heroes and gods of antiquity, and is almost certainly derived from a solar myth of the sun rising in the constellation of Virgo. The story of the massacre of the innocents is related of Krishna, and if we accept the narrative of Matthew, we have to suppose that there were two wicked kings, one in India and another in Judæa, separated by an interval of many centuries, who both adopted the same expedient of a massacre of all male children under two years of age, to destroy a Divine Incarnation who was born in one of their cities. The escape by flight, owing to a miraculous warning and other particulars, are almost word for word the same in the two legends, and we may fairly assume that both are alike unhistorical. We know that a

whole crop of such legends grow up in early Christian tradition, for we have the Gospel of the Infancy, which is full of the most childish and absurd magical tricks, supposed to have been performed during the boyhood of the Messiah.

The first firm historical ground is afforded by the Gospel of St. Mark, who begins with the visit of Jesus to John the Baptist. This is very likely to be true, for we know from Josephus that the time was one of great religious and political excitement, and that there were several such preachers or prophets as John the Baptist is described to have been, who went about holding what may be called camp-meetings, and in some cases causing local insurrections, which had to be repressed by the Roman soldiery. Nothing is more likely than that a young man of original genius and strong religious sentiment, should go to one of such meetings, not far from his home, to hear a celebrated preacher. That such a young man was not altogether satisfied with the narrow and fierce denunciations of a rude ascetic, and did not enroll himself as one of his disciples, was also very probable; but that John really did make a considerable impression on him is evident from the fact that he left his home immediately afterwards, assumed the character of a wandering missionary, and began to preach identically the same gospel as that of John—"Repent ye, for the kingdom of heaven is at hand."

Let us pause for a moment to consider what was meant by the kingdom of heaven being at hand. It did not mean such a millennium as certain enthusiasts may now suppose, after nineteen centuries of unfulfilled expectation, that is, the advent of an era of purer morals and better laws, but the literal end of the world and last judgment, to take place within the lifetime of some of the existing generation. "The sun was to be darkened, the moon not to give her light, and the stars fall from heaven." And then they were to see the "Son of Man coming in clouds with great power and glory," and his angels to gather all mankind from the four winds of heaven before the judgment seat, where the tares are to be separated from the wheat, the goats from the sheep, the good rewarded and the wicked cast into everlasting fire. Nothing can be more explicit than the assurance that this event would come to pass in the lifetime of the present generation. "Verily I say unto you, This generation shall not pass away until all these things are accomplished."

Such was evidently the current opinion among the apostles and early Christians; and even the cultured and educated Paul, some twenty years later, repeats it with the fullest conviction, and describes how "the Lord shall descend from heaven with a shout, with the voice of an archangel, and with the trump of God;" and how "the dead shall rise first; then we that are alive, that are left, shall together with them be caught up in the clouds, to meet the Lord in the air."

It is clear that, according to all rules of ordinary reason, predictions thus confidently made and conclusively refuted, are an irresistible argu-

ment against the possession of any inspiration or special foresight on the part of the prophets, and that prophecies, like miracles, must be relegated to the province of faith. But, on the other hand, they bring us nearer to the human and historical element in the New Testament. They supply a motive power which may explain the early conversions and the rapid spread of the new religion. Evidently the hope of a large and immediate reward was present in the minds of the apostles. These humble peasants and fishermen were "to sit on twelve thrones judging the twelve tribes of Israel," and "every one who has left houses, or brethren, or sisters, or children, or lands, for My Name's sake, shall receive a hundred-fold." And this not in a remote future, but in the lifetime of the existing generation. It is conceivable also that many educated Jews, who despaired of an armed resistance to the overwhelming power of Rome, might be inclined to view with favor the idea of a spiritual Messiah who should bring about the advent of an end of the world and last judgment, in which the elect children of God should be rewarded and the heathen punished.

Another element which must have contributed largely towards the reception of the Gospel by the poorer classes, is the extreme socialistic spirit which is uniformly displayed. For "rich" write "capital," and for "poor" "wages," and the preaching of Jesus is almost identical with that of modern socialists. The poor are to be rewarded and the rich punished in the kingdom of God, irrespective of any merit or demerit. Thus, "blessed are ye poor," "woe unto you that are rich." Even the rich young man, who had kept all the Commandments, is told that he cannot be saved unless he "sells all his possessions, and gives to the poor;" and the remark of Jesus is, that it is "easier for a camel to go through a needle's eye, than for a rich man to enter into the kingdom of God." For anything that appears to the contrary, Lazarus may have been a loafing vagabond, who had brought poverty and disease upon himself by his own misconduct, and Dives a man who, having inherited a large estate, spent it hospitably in entertaining his neighbors; but no moral is inculcated. It is enough that Lazarus is poor and Dives rich to place one in Abraham's bosom and the other in eternal fire.

It is evidently neither in these falsified prophecies nor in this exaggerated socialism that we are to find the fascination which the ideal of Jesus has exercised over so many minds for so many centuries. It is rather in the interpretation which he gave to the first words of the Baptist's formula, "Repent ye, for the kingdom of God is at hand." Repentance, as taught by Jesus, meant not merely an outward obedience to formal laws and abstinence from direct breaches of moral commandments, but such a spiritual conversion as embraced the whole sphere of human life, and made the very idea of sin insupportable. Men were to be good, pure, merciful, compassionate and charitable, because the principle of "loving God, and thy neighbor as thyself," was so wrought into the soul that it became a second nature. The law was to be observed, but in a liberal,

tolerant, and comprehensive spirit, and the intention was to be looked to rather than the outward act. The widow's mite was of more value than the rich man's offering, and the publican's remorseful prayer was more acceptable than the formal and lengthened devotions of the strait-laced Pharisee.

It is remarkable, when we come to consider it, how much more the ideal of Jesus, which is the central fact of Christianity, if founded on the precepts and parables by which this spiritual religion is taught, and by the human incidents of his life which illustrate it, than it is on the alleged miracles. The Sermon on the Mount, the Parable of the good Samaritan, the tenderness to children, the affectionate and "sweetly reasonable" intercourse with his humble followers, these and such as these are the traits which build up the ideal character which draws all hearts.

The miracles, on the other hand, are at best, but capricious instances of a supernatural power, healing one and leaving thousands unhealed, and failing when most required as evidences, as in the case of the incredulous Nazarenes and the Pharisees who asked for a sign; while at the worst, some of them are wholly inconsistent with the historical character of the just and gentle Jesus. Thus the miracle of the Gadarene swine, if true, obviously detracts from this character. It is an act of cruelty to animals, for what had the poor swine done to deserve death, and it is a wanton destruction of property cruel to the owners. Doubtless these swine had owners, some perhaps poor Galilæan peasants, who like those of Donegal or Galway, depended on the pig to pay their rent and save them from eviction. It was a wanton and a cruel act to send their humble property to destruction in order to please a pack of devils. Again, the miracle of the fig-tree reads rather like the hasty curse of a passionate fool, than the act of a gentle, long-suffering, and sweetly reasonable man.

But to return to the historical narrative, I find no difficulty in believing that the accounts of the commencement of the mission of Jesus, of his comings and goings among the small towns of Galilee, of his camp-meetings, and of most of his preachings, parables, and sayings, are substantially accurate. There is nothing improbable in them, except in some of the miracles taken literally, and these may readily be explained, or indeed were inevitable, in such a medium of excited crowds of poor and ignorant men, where every one believed in miracles as events of daily occurrence, and where many natural acts of faith-healing and casual coincidences had given a popular prophet the reputation of being a worker of mighty works.

Indeed many of the miracles appear as if they had a nucleus of historical fact, which became expanded into legend. Thus, the legends of Jesus and Peter walking on the sea appear to be based on the first simple narrative, how a sudden squall having overtaken the boat in which they were crossing at night, they awoke Jesus, who was asleep, and the squall passed over.

Those, again, of the "loaves and fishes" may have readily arisen from the recollection of some occasion when a scanty supply of food had lasted out longer than was expected, owing very probably to many of those who attended the camp-meeting having brought their own provisions, a conjecture which is confirmed by the abundance of baskets in which to collect the fragments, and which could not have been required to carry seven or five loaves.

These, however, are mere conjectures, and not to be taken as facts, and I only mention them to show that a good many of the miraculous legends need not necessarily detract from the general historical value of Mark's simple narrative of this early part of the career of Jesus in Galilee.

And I think the sayings and parables may generally be taken as authentic. It is true that many of both may be found in the literature of the Talmud and of older religions, but this does not negative the probability that Jesus may have used them in his popular addresses, and at any rate they afford a view of what his doctrine and style of preaching really were and many of the parables and shorter sayings are just such things as would be readily retained in the memory and transmitted by oral tradition. Many of the details also of the incidents and wanderings to and fro of this Galilean period are very like what might be expected from the reminiscences in old age of an apostle like Peter, who had accompanied Jesus from the first, though we must always recollect that the author who worked up these reminiscences, as described by Papias, into a connected biography, may have added a good deal from other sources.

I am inclined also to accept as authentic a good many of the controversies between Jesus and the Scribes and Pharisees. They are exactly in the style of the verbal conflicts which were so common in the East, and which survived down to the scholastic tournaments of the Middle Ages. An opponent makes a desperate thrust by a puzzling question, it is parried by an adroit answer, both leaving the root of the matter untouched. Thus the celebrated answer, "Render unto Cæsar the things that are Cæsar's, and unto God the things that are God's," is clever, but no answer to the real question whether a conscientious servant of Jehovah could voluntarily pay taxes to a heathen power which had usurped his place. The position was precisely that of a conscientious Dissenter in our own days, who was in doubt whether to pay Church rates, or let his chattels be seized. He would have got little enlightenment from being told to pay Queen Victoria the things that were hers, and render to God what was God's. The question was, what things were Cæsar's and what God's.

Again, the puzzle of the Sadducees, whose wife she would be in heaven who had been married successively to seven brothers, remains a puzzle to this day. It is no question of marrying in the kingdom of heaven, but of marriages which have taken place on earth. Shall we preserve our personal identity after death, so that two souls which have been

united by the holiest and closest ties while living, shall be united in a future life? Shall we know and recognize those whom we have loved and lost :

“ See every face we feared to see no more ; ”

or is Arthur's last wish that Guinevere should cling to him and not to Launcelot, when they meet before “ the fair father Christ,” a vain dream? If it be not, who can answer the Sadducees' question or say more than our greatest poet—

“ Behind the veil, behind the veil ? ”

What Jesus might have said, but did not, is, The rule is an abominable one; it degrades the sanctity of marriage, and reduces woman to a mere chattel, who is to be handed over like an ox or an ass—they to bear burdens, she to bear children—for their master Man.

Up to this point, therefore, I see no difficulty in accepting the Synoptic narrative, best told in the earliest and simplest Gospel of Mark, as being in the main historical. And if so, the best picture I can form of it is something very like the Salvation Army of the present day. The movement had evidently no political significance, and attracted little notice, or Josephus must have mentioned it, and there is no trace of any interference with it, in the earliest stages, on the part of the authorities. In fact, the modern Salvationists have suffered more from provincial Bumbles and Justice Shallows than Jesus and his disciples seem to have done while they remained in Galilee. But, like the Salvation Army, there was a loose organization of a general, twelve principal officers, and a body of disciples or professed adherents, who went about holding camp-meetings and preaching the advent of the kingdom of God and a new and better life to excited crowds, who listened eagerly and on the whole sympathized with them. The only difference was in the superior genius, eloquence and attractiveness of the personality at the head of the movement, and the purity, spirituality, and general excellence of his doctrine.

There are one or two points in this doctrine which it is interesting to consider. Did Jesus consider himself as a Jewish reformer, or as the founder of a new religion? Decidedly the former. The declarations are quite explicit : “ Think not that I come to destroy the law or the prophets, but to fulfill ; ” “ Till heaven and earth pass away, one jot or one tittle shall in no wise pass away from the law ; ” “ I was not sent but unto the lost sheep of the house of Israel.” He was as far as possible from Paul's doctrine, that he was sent to liberate the Jews from the bondage of the law, and to introduce a new and universal religion for Jews and Gentiles alike. But in a few exceptional cases he healed Gentiles who had shown extraordinary faith, and his interpretation of the law was a large and liberal one, looking to the spirit rather than the letter of the Mosaic commandments, and rejecting the trifling and vexatious rules which the Scribes and Pharisees had introduced in later times. Thus, he strolled through

the fields on a Sunday afternoon with his disciples, plucking ears of corn, and declared that "the Sabbath was made for man, not man for the Sabbath," a saying in respect of which our modern Pharisees have generally sided with those of old rather than with the liberal minded and tolerant Jesus.

What did Jesus believe respecting his own Messiahship? This is a very perplexing question, aggravated by the tendency, after the doctrine was firmly established, to invent or adopt traditions showing that he had fulfilled the conditions attached to such a character by the prophecies of the Old Testament, and by the prevailing expectations.

But it is tolerably clear that in the early part of his career he advanced no such pretension. The Gospels all agree in describing the remarkable persistency with which he endeavored to suppress all evidence which tended to support such a claim. The evil spirits who recognize him, the patients whom he miraculously cures, Peter when he calls him the Christ, are all enjoined to "tell no man anything." When the little damsel is supposed to have been raised from the dead, his first care is to "charge them much that no man should know this." In any ordinary case the inference would be that he did not wish miracles, which passed muster with ignorant disciples, to be investigated by impartial and educated critics. If this explanation be negatived as inconsistent with his pure and holy character, the only other that can be suggested is, that he did not wish it to be supposed that he was a supernatural being attested by miracles, believing miracles to be vulgar things of which even false prophets might be capable, but that he preferred to rely on the excellence of his doctrine and his own powers of eloquence and persuasion.

It would seem, however, that later in his career the conviction began to dawn on him that he might be the Messiah of the prophecies, and that he stood in some peculiar relation to God, and would be His vicegerent in inaugurating His kingdom and holding the assizes of the last judgment.

The most distinct assertion of this is found after he had gone to Jerusalem, in his reputed reply to the adjuration of the high priest to say whether he was "the Christ, the Son of the Blessed," to which he replied, according to one version, "I am," and to another, "thou sayest."

It is evident, however, that he never thought of equalling himself to God, or representing himself in the literal sense as being "of one substance with the Father," and he would probably have torn his clothes and shouted "blasphemy" if he had heard the articles of the Athanasian Creed. To the last he uses the term "Son of man" in speaking of himself, even in his answer to the high priest, and he never adopts the language of the evil spirits who address him as "Jesus, thou Son of the Most High God," or as "the Holy One of God." He never doubts that "my Father is greater than I," or that God alone knows things which he does not know.

The best clue to his conception of himself is, to my mind, afforded by the pathetic dying words, "Eloi, Eloi, lama sabachthani?" These, if any, must be historical, for they tell against the orthodox view, and could never have been invented, while they are just the sort of thing which would impress itself, in the actual words spoken, on the memory of his affectionate disciples. But if these words were really spoken, they show that he really believed himself to be the promised Messiah, and trusted up to the last in some signal miraculous act of deliverance, such as the advent of the last day, or the descent from heaven of "more than twelve legions of angels."

It is worthy of remark that the author of Luke seems to have felt the force of this objection, for he transforms the expression into "my God, into Thy hands I commend my spirit, and inserts "Forgive them, for they know not what they do," which words are not found in any other record. It is evident that if Luke's version had represented the words really spoken, they could never have been altered by eye-witnesses or by early tradition, into words conveying such a totally different impression as "My God, my God, why hast Thou forsaken me?"

We come now to the concluding scene at Jerusalem, when it becomes more than ever difficult to distinguish between fact and legend. The narrative of the three Synoptic Gospels are fairly consistent up to the Crucifixion, when they become hopelessly discordant. That of John is apparently founded on the same tradition, though, after the fashion of the author, dealt with in a very free-hand way, altered, transposed so as to make it the ground-work for several dogmatical speeches and visits to Jerusalem, and embellished by various amendments and details. But the primitive narrative is clear enough. Jesus and his apostles go up to Jerusalem to keep the Passover; they are received there with a triumphal procession; Jesus clears the Temple of the money-changers; the authorities become alarmed, but are afraid to arrest him openly, as the people are in his favor; one of the apostles betrays his hiding-place, and he is arrested at night; he is tried and condemned by the Sanhedrim and by the Roman Governor; Pilate believes him to be innocent and tries to save him, but the Jews clamor for his blood; Pilate yields, and he is crucified.

Thus far the story is consistent, and it involves nothing that is impossible. But it is full of the gravest improbabilities. Why should the Jews, who one day are so much in his favor that the authorities are afraid to arrest him, be converted in a single day into a furious crowd clamoring for his execution? Why should an appeal to Pilate be necessary for a religious offence against the Mosaic law, when Stephen, under precisely similar circumstances, was publicly stoned to death, and Paul made havoc of Christians without any Roman mandate? Why should false witnesses, whose testimony was inconsistent, be required to prove an offence which Jesus avowed in open court?

But the portion of the narrative which relates to Pilate is that which is

open to the gravest suspicion. It is opposed alike to human nature and to Roman practice, that a high functionary should first publicly proclaim his belief in the innocence of a prisoner whom he was trying, and go through the solemn act of washing his hands to show that he would not be guilty of his blood, and immediately afterwards condemn him to a cruel and ignominious death. Nor is it conceivable that such a Governor, if forced to yield by the threat of being reported to Cæsar for disloyalty, should insist, against the remonstrances of the Jewish rulers, in placing an inscription on the cross which proclaimed Jesus to be "the king of the Jews."

In fact, the whole episode of Pilate has very much the air of being an interpolation of much later date, when the feeling of hatred between Christians and Jews had become intense. The object evidently is to show that this hatred was justified by the Jews having imprecated the blood of Jesus on their own heads and those of their sons, and to represent the heathens as having been better than the Jews, inasmuch as Pilate tried to save Jesus, and to a certain extent believed in him. It is difficult to believe that such a narrative could have come from men like Peter, John, and James, who remained devout Jews, zealous for their faith and country.

Nor, again, it is easy to see how, if the events had really assumed the publicity and importance assigned to them, there should be no mention of them by Josephus, or any contemporary writer especially if there was, as the Gospels say, a miraculous darkness over the land, an earthquake, the veil of the Temple rent, and ghosts walked about the streets. The Gospel narratives also, though consistent in the main outlines, contain a number of discrepancies in details which show that they were not derived from any one written document or from any fixed tradition. Thus, Judas' death is differently described. Herod is introduced by Luke and not mentioned by the others. Jesus carried his own cross in one account, while Simon of Cyrene bore it in another. Jesus gave no answer to Pilate, says Matthew; he explained that "his kingdom was not of this world," says John. Mary his mother sat at the foot of the cross, according to John; it was not his mother, but another Mary, the mother of Salome, who "beheld from afar," according to Mark and Matthew. There was a guard set to watch the tomb, says Matthew; there is no mention of one by the others.

These, however, are minor discrepancies which are only important as showing that there was no clearly fixed historical tradition, except of the general outline of the course of events, when the different Gospels were compiled, and subsequent to the Crucifixion there is, as we have already seen, a hopeless discordance.

In some cases it is almost possible to trace, step by step, how the legends grew with each successive repetition. Thus, according to Mark, two women went to the tomb, found the stone rolled away and the tomb

empty, and saw a young man clothed in white who gave them a message to Peter and the disciples, that Jesus has risen and gone before them to Galilee, where they would see him—a message which they never delivered, being afraid. In Matthew the young man has become an angel who rolled the stone away and sat on it, delivering the same message to go to Galilee, where his disciples would see him, which they ran and delivered. In Luke there are the same two Marys, with another woman named Joanna, and several others, and they saw, not one but two men in dazzling apparel; “go to Galilee” is changed into “as he spoke unto you while yet in Galilee,” which in the Acts is enlarged into a positive injunction “not to depart from Jerusalem;” and Peter is introduced as running to the tomb and finding it empty. In John there are two angels; John runs along with Peter to the tomb; and Mary Magdalene has a miraculous vision of Jesus, whom she at first mistakes for the gardener. No one who reads these narratives by the ordinary light of reason can doubt that the simple story of Mark is nearest to the original fact or tradition, and that the successive amplifications of one into two, men into angels, the introduction of Peter, and finally of Peter and John, and the miraculous vision of Mary Magdalene, have grown up about it. If the facts had really happened as described by Luke and John, no one could have subsequently cut them down into the bald statement of Mark, while the opposite process is what we know to be historically true in the case of so many early Christian martyrs and mediæval saints. It is the clearest possible case of the application of the principal of the “Minimum of Miracles.”

I may here remark, however, that, as I said before, the historical nucleus is of minor importance compared with the fact that the belief in the Resurrection did somehow come to be entertained, and became the chief agent in the establishment and evolution of the new religion, and that there is no reason to doubt that it was honestly entertained by sincere men, who, if they did not see it with their bodily eyes, saw it with the eyes of faith, and to whom visions, dreams, hallucinations, and subjective impressions, were as much facts as objective realities.

In trying to disentangle the historical nucleus from these legends, the best ray of light I can discover is afforded by the account of the riot in the Temple, and assault on the traders who change money and who sold doves and other objects of sacrifice. This is found in all the Gospels, and could hardly be an invention, while if true it must have been followed by immediate consequences. Prompt and stern repression must have been exercised both by the Jewish and the Roman authorities.

We must recollect that their point of view would not be that of later Christians, when the faith in the Divine character of Jesus had been established for centuries, but that of contemporaries who knew nothing of him but as the provincial prophet of an obscure sect. To recur to the simile of the Salvation Army, it would be as if a body of Salvationists.

who had preached without interruption in some remote province of Russia, came to Moscow, and in a fit of religious enthusiasm invaded the cathedral, and broke the windows of the shopkeepers in its vicinity who exhibited Ikons and other sacred objects of the Greek ritual. Undoubtedly the Metropolitan would complain to the Governor, and the leader of the rioters would be summarily arrested, and if not crucified, sent to Siberia.

Supposing this narrative to be true, it affords a natural explanation of many of the incidents recorded. A disciple might well be bribed to disclose the hiding-place of his master ; the arrest might be made under the circumstances described ; the disciples might disperse in alarm, and Peter deny his connection with them ; Jesus might be taken before the high priest, and by him referred to the Roman Governor. The incredible legends about his trial and Pontius Pilate might resolve themselves into the fact that Jesus had no defence to make, and was condemned, not on theological grounds, or on the charge of having proclaimed himself as a temporal king of the Jews, but on the simple charge of having been the ringleader in a serious riot. Crucifixion would, as we know from numerous instances in Josephus, have been a common Roman method of dealing with such leaders, and its various incidents, such as the brutality of the soldiers and the procession to Golgotha, are only what might be expected. The historical part of the narrative can hardly be carried farther than that Jesus came up to Jerusalem with a body of his followers, that a riot took place in the Temple, and that he was arrested, tried, and executed by the Roman Governor at the request of the Jewish authorities. His entombment and the finding of the tomb empty rest, according to Mark, who is the best authority, on the testimony of two women, Mary Magdalene and Mary the mother of James, who are alone mentioned as seeing where the body was laid, and of these two women and Salome, who found the tomb empty, but, being afraid, said nothing at the time to any one.

The next historical question is one of great importance. Did the apostles, as directly asserted by Matthew, and indirectly by Mark, return immediately to Galilee, where the belief in the Resurrection took form ; or did they, as asserted with equal positiveness by Luke, remain at Jerusalem, where a series of startling miraculous appearances took place ?

There can be little doubt in considering the Galilean tradition to be the true one. Independently of the great weight of authority for considering the narrative of Mark, which is substantially the same as that of Matthew, to be the earliest and most authentic, it is inconceivable that, if events had really occurred as described by Luke, any author or compiler of any other Gospel should have ignored them and transferred the scene to Galilee. However simple-minded such an author may have been, he could not but have seen that he was weakening immensely the evidence for the cardinal fact of the Resurrection, if, instead of referring to such

precise and definite statements of miracles, including the Ascension, occurring in or near the capital city Jerusalem, in the presence of numerous witnesses, many of whom survived to attest their truth twenty or more years afterwards, he either omitted all mention of such occurrences like Mark, or like Matthew transferred the scene to a remote province and to a select few of his own disciples, and whittled down the evidence to the vague statement that these went into the "mountain where Jesus had appointed them," where "some worshipped him and some doubted."

Such a perversion of Luke's narrative might well have come from an enemy of the new faith, but hardly from an apostle. On the other hand, at a subsequent period, when the eye-witnesses were dead, and the original records and traditions were obscured by time, and when the dogmas of the Resurrection and Divine nature of Jesus were firmly established, nothing is more likely than that the birthplace of the new religion should be transferred to Jerusalem, and the vague statements of occurrences in Galilee should be transformed into a series of stupendous miracles occurring at the sacred city in the presence of a large number of witnesses.

The probabilities of the case also are all in favor of the return to Galilee. The disciples had come to Jerusalem on a special pilgrimage, to keep the Passover there, which was over; there was no intimation of any intention to remain, nor could they well have brought with them any sufficient resources for a long stay. They were in mortal fear of the Jews, and several of them had wives and families at home, to whom they would hasten to return. If we could believe John, they not only returned, but resumed their original occupation as fishermen; but I lay little stress on this, as the author of John, whoever he was, was evidently a man of considerable literary attainments and dramatic genius, which he displayed in writing a Gospel, great parts of which may be most aptly described as a theological romance.

But it is useless to dwell on details, as the conclusive argument is, that Mark and Matthew could by no possibility have written as they did if the course of events immediately after the death of Jesus had really been, or even had been generally supposed to be, as described by Luke.

With the return of the disciples to Galilee the curtain falls on what may be fairly called the historical drama of the life of Jesus, and we enter on a region where all is conjecture and uncertainty. The belief in the Resurrection evidently grew up in Galilee. It probably originated with the women, for they are mentioned in all the accounts as the first to have seen the risen Jesus, or to have brought a message from him or from angels, and this is hardly likely to have been invented.

If at first they were afraid to tell any one, nothing is more natural than that, when they found themselves in their own country and among friends, their tongues would have been loosened, and they would begin

to talk of the wonderful things they had seen, or fancied they had seen, at Jerusalem.

The only thing certain is, that the belief in the Resurrection, once started, grew rapidly, but that the various accounts of how it grew are so vague and contradictory that it is hopeless to attempt to draw any certain conclusion respecting them. This will be apparent if we simply place in juxtaposition the five different records which have come down to us in the New Testament.

The most certain authentic record is that related by St. Paul in his Epistle to the Corinthians. It is true that Paul was not an eye-witness, or at all likely to have examined the evidence critically, and he places the appearance to himself, which, whether supernatural or not, was obviously in the nature of a vision, on precisely the same footing as the others. Still it is good evidence that, some twenty years after the event, the appearances he mentions were currently believed by the early Christian community at Jerusalem.

They are six in number, and presumably, though he does not mention the place, all at Jerusalem, except that to himself on the road to Damascus. Vis.:

1. To Peter.
2. To the twelve.
3. To above 500 brethren at once.
4. To James.
5. To all the apostles.
6. To himself.

Compare this with the other accounts, beginning with that of Mark, which probably came direct from St. Peter.

In the genuine Mark of the oldest manuscripts—

Miraculous appearances.

None. Only a message from a young man in white delivered to the two Marys and Salome.

In the addition to Mark, introduced later than the date of the oldest manuscripts—

- Three.
1. To Mary Magdalene.
 2. To the two walking from Emmaus.
 3. To the eleven.

1 and 2 being distinctly stated not to have been believed by those to whom they were told, at the time of their alleged occurrence.

According to Matthew—

Miraculous appearances. Two.

1. To Mary Magdalene and the other Mary at Jerusalem.
2. To the eleven on a mountain in Galilee, when some worshipped and "some doubted."

According to Luke—

Miraculous appearances. Four—all at Jerusalem.

1. Messages of two men in dazzling apparel, probably angels, to the two Marys, Joanna, and other women.
2. To the two disciples walking from Emmaus, who at first did not recognize him.
3. To the eleven, when he eat the broiled fish.
4. The Ascension, when he was bodily taken up in a cloud to heaven in the presence of the eleven.

According to John—

Miraculous appearances. Four—first three at Jerusalem, fourth in Galilee.

1. To Mary Magdalene alone, who at first took him for the gardener.
2. To the disciples sitting in a room with closed doors.
3. A second time to the disciples, to remove Thomas' doubts.
4. By the sea of Galilee, when Peter and six other disciples caught the miraculous draught of fishes, when at first none of them recognized him.

And John expressly states that this last was the third appearance to the disciples after Jesus had risen from the dead, thus excluding all others except 1, 2, and 3.

It will be remarked, that of the five miraculous appearances recorded by St. Paul as being the current belief at Jerusalem twenty years after the event, three, those to Peter, James, and above 500 brethren at once, are not even mentioned in any other account. The latter can hardly be the same as Luke's Ascension, which comes in its natural place as the concluding scene of the great drama of the life and resurrection of Jesus, and the spectators are confined to the eleven apostles.

Paul's No. 5, or second appearance to all the apostles, may refer either to that described by John to convince Thomas, or to Luke's Ascension; but Paul makes no mention either of Thomas or of the Ascension, which would be very strange if the bodily Ascension to heaven was a cardinal article of faith when Paul visited Jerusalem, which it must have been if it really happened as described by Luke. There remains therefore only the vague tradition that Jesus had appeared to the twelve, as to which the enumeration by Paul of five miraculous appearances receives the slightest confirmation from any of the Gospels.

The Gospel accounts, again, vary so much that there is not a single case in which any one is confirmed by any of the others. The nearest approach to it is in the appearances to the woman; but here John says distinctly it was to Mary Magdalene alone; while Matthew says it was to the two Marys; Luke, that the vision was to the two Marys, Joanna, and other women, and was one of angels, and not of Jesus; Mark, that the message was given to the two Marys and Salome by a young man. Evidently the tradition as to the women was very vague.

Again, the Ascension of Jerusalem, the greatest of all the miracles, rests on Luke alone, and is negatived by the testimony of Matthew and John, that the apostles returned to Galilee, and that the final scene, whatever it may have been, took place there; and still more significantly by their silence and that of Mark, respecting an event which, if it took place as described by Luke, must have been known and mentioned.

The appearance to the two disciples returning from Emmaus rests also on the sole authority of Luke, and that to convince Thomas on that of John. The miraculous draught of fishes is mentioned by John, and by John alone. The appearance to the eleven is the only event mentioned by three of the Evangelists, but of these, two place it in a room at Jerusalem, while one places it on a mountain in Galilee.

It is evident that it would be futile to attempt to form any historical estimate from such accounts as these; they must be left, with miracles generally, to the province of faith rather than that of reason. All we can rationally infer is, that, as in the case of St. Thomas-à-Becket and so many other saints and martyrs, the growth of miraculous myths was very rapid, and that probably those records which contain the fewest of them must date back very closely to the original events, and to the actors who took a principal part in them. I have never been able to see any explanation of the silence of the Gospel according to St. Mark respecting any miraculous appearances after the Resurrection, and the brief and vague reference to them in St. Matthew, except in the supposition that the account given by Papias is true, and that they are really based on written notes taken down by Mark from Peter, whose authority was sufficient to prevent later compilers and editors from adding to them legends and traditions which were floating about in the early Christian world, unsupported by any direct apostolic authority.

Here then the curtain falls on any attempt to realize the historical element in what Huxley so appropriately terms "the grand figure of Jesus as it lies embedded in the primary strata of Christian literature." We see him crucified at Jerusalem, his disciples returning to Galilee, and the faith in his Resurrection growing up there, and soon becoming an assured conviction, though with no agreement as to the facts on which it was founded, and rapidly becoming surrounded with an atmosphere of myths and miracles.

The next stage is even more obscure. We have no information as to when and how the apostles returned to Galilee from Jerusalem, and became, as we find them twenty years later, pillars of the Church there, and leaders of a great religious movement. The Acts of the Apostles may contain some authentic records of their proceedings at a later period, after they had established themselves at Jerusalem, and exchanged the profession of fisherman for that of missionaries of the new religion; but Luke's account is discredited by the obvious fact that his earlier narrative of what occurred during the first period of the Crucifixion is unhistorical. It is

clear that some time must have elapsed, and considerable changes taken place at Jerusalem, during the interval between the departure of the disciples for Galilee in mortal fear of the Jews, and their return to the capital, where they seem to have preached publicly, and made numerous converts, without any serious interference by the populace or the authorities.

The narrative of this early period in the Acts, up to the date of Paul's appearance on the scene, is full of improbabilities. The miracles attributed to Peter, his deliverance from prison by angels, the gift of tongues by the Holy Ghost, which did not enable Peter to dispense with an interpreter, these and many other incidents have rather the air of legends than of genuine history. They stand in marked contrast with the naïve and natural incidents recorded by Mark, how the crowd overflowed into the street, how the bustle was such that they had no time to eat, how Jesus slept through a night-squall which endangered the boat. I can find no solid historical ground until Paul met the pillars of the Church at Jerusalem, except the general fact that the apostles returned there from Galilee, preached publicly, made numerous converts, and that Peter probably played a leading part. But with the death of Jesus and the flight of his disciples to Galilee the first chapter ends, and the second opens with the history of the early Christian Church, when the preoccupations of the principal actors were doctrinal rather than historical, and we enter on a new and wider phrase of religious controversies and metaphysical speculations. It requires all the erudition of the most learned divines and professors to find any clue through this labyrinth, and takes us far from that which is the sole object of this essay—to endeavor to form some conception of what may be the historical element in the records of the life and death of the founder of the religion.

CHAPTER X.

SCEPTICISM AND PESSIMISM.

CARLYLE was a great genius, but he was a dreadful croaker. Barren, brainless, soulless, faithless were the epithets he commonly applied to the age in which he lived, and his favorite simile for his contemporaries was that of apes chattering on the shores of the Dead Sea. In the case of Carlyle, the cause of this pessimism is not far to seek. He suffered from chronic dyspepsia. If with the many other excellent qualities of his peasant progenitors, he had inherited some share of the "*dura messorum ilia*," and been able to eat his three square meals a day, and feel all the better for it, his views of the age and of his contemporaries would have been materially altered. He would have seen an age which is one of the most marked chapters in the history of human evolution; an age of great events and marvellous progress, progress not material only, but fully to an equal extent social, political, moral, and intellectual. The shores of the Dead Sea would have blossomed with verdure, and instead of chattering apes he would have seen human faces, "men my brothers, men the workers," with a great deal of human nature in them, good and bad, weak and strong, joyous and sad, healthy and suffering, but on the whole working up to a level which, if not necessarily happier, is at any rate higher.

For such dyspeptic pessimists there is an excuse. Pessimism is probably as inevitably their creed as optimism is for the more fortunate mortals who enjoy the "*mens sana in corpore sano*." But there are a large number of our modern pessimists for whom no such excuse can be pleaded.

There are the would-be superior persons, who think their claim to superiority is best established by affecting a lofty air of superfine disdain for the rude realities of real life; the critics who, as Lord Beaconsfield wittily says, are the failures; the minor poets, painters, and writers who, in their own opinion, would have been shining lights if their tapers had burned in a more congenial atmosphere; the prejudiced politicians and aristocratic classes who feel that knowledge, and with it political power, is passing over to the masses. And above all there are the orthodox divines, and good but narrow-minded religious public, whose one idea of religion is that it consists of adherence to traditional dogmas, and an un-

broken belief in the truth of every word of the Bible as the inspired word of God, and the *ne plus ultra* of human knowledge.

With prejudices such as these it would be a waste of time to attempt argument; but there are a certain number of earnest and thoughtful men who hold what are substantially the same views upon different grounds, which deserve more careful consideration. They are not confined to social swells, would-be superior persons and orthodox theologians, but even a man of light and leading like Mr. Frederic Harrison can see no salvation except in the exceedingly improbable contingency of the world adopting the cult of humanity as evolved by the inner consciousness of M. Auguste Comte. What they say is substantially this, Science is killing faith; scepticism and democracy are advancing on old creeds and old institutions, like the lion of the desert, who in Tennyson's splendid simile—

“Drawing nigher,
Glares at one who nods and winks behind a slowly-dying fire.”

Religion, they say, is becoming extinct, not only in the simple, old-fashioned sense of belief in creeds and catechisms, but in the higher sense of doubting the truth of the essential principles on which the Christian scheme of theology, and ultimately all spiritual faith and all religions, depend. A God who, according to one eminent Anglican divine, has been “defecated to a pure transparency,” and, according to another, removed behind the primeval atoms and energies into an “original impress” acting by unvarying laws, is, they tell us, practically equivalent to no God at all, and instead of agnostics we ought to call ourselves atheists. Without a lively faith in such a personal, ever-present Deity, who listens to our prayers, modifies the course of events, records our actions, and finally rewards or punishes us after death according to our deserts, there can be, they say, no real religion; and they hold, and I think rightly hold, that the only support for such a religion is to be found in the assumed inspiration of the Bible and the divinity of Christ.

Destroy these, and they think the world will become vulgar and materialized, losing not only the surest sanction of morals, but what is even more important, the spiritual aspirations and tendencies which lift us above the sordid realities of daily existence, and give poetry to the prose of life. The Muses will take their flight with their sister Theology to happier spheres; imagination, idealism, heroism, and originality will disappear, leaving the world to a barren and prosaic sort of Chinese civilization. In short, their forecast of human existence is very similar to that which astronomers make of the planet upon which the human race live, viz., that as its inner heat radiates away in the course of ages, it will become, like its satellite the moon, a barren and burnt-up cinder.

To these gloomy forebodings I venture to return a positive and categorical denial; and to assert, on the contrary, that scepticism has been the great

sweetener of modern life, has not only given us truer and juster views of the realities of the universe, but has made us more liberal-minded, tolerant, merciful, charitable, than in the hard, cruel days of mediæval superstition, and, in a word, that almost in exact proportion as we have drifted away from the letter, we have approached nearer to the spirit of true Christianity.

This, I am aware, will appear to many a strong assertion, and I must be prepared to justify it by specific instances, which I proceed to do. But first let me define what I mean by the term "scepticism." In a general way it means allegiance to truth; the habit of mind which makes a man, like a conscientious jurymen, require evidence before he delivers his verdict, and if the evidence is insufficient makes him return one of "not proven." Doubt of doubtful things is to such a one as sacred a duty as affirmation of what is true and denial of what is false. His cardinal maxim is that of Dr. Johnson, "Clear your mind of cant." Don't say you believe when you really disbelieve, or only half believe, and try to hide your misgiving from yourself and from the world by loudness of asseveration or bitterness of denunciation.

But to this general meaning of the word scepticism a more limited and precise significance has come to be attached, and it is commonly used to denote disbelief in the inspiration of the Bible and the dogmas of theological Christianity. In this sense I accept it, and proceed to join issue with those who deny my assertion, that the world is a better place to live in on account of scepticism.

I will begin by taking a specific instance—the treatment of lunatics. Ever since the establishment of Christianity there has been a controversy between doctors and theologians. Theologians, and the public generally, relying on texts of Scripture, held that lunacy, with its kindred diseases of epilepsy and nervous affections, were caused by demons, or evil and unclean spirits, taking bodily possession of the unfortunate patients. Doctors, who for a long time alone represented the cause of science, relying on fact and experiment, and the teachings of great physicians of pre-Christian times, such as Hippocrates and Galen, held that such diseases were simply cases of pressure on the brain and over-wrought nervous systems. This was held to be so contrary to the truths of revealed religion, that doctors were looked upon as infidels of the worst sort, and the saying became general, "*Ubi tres medici duo Athei*;" atheist being the polite appellation with which every one was pelted who dared to appeal from Scripture to reason, and think for himself.

This radical divergence of view respecting the cause of lunacy led naturally to a corresponding difference in the mode of treatment. From the orthodox point of view the lunatic was a loathsome and repulsive object, whose body, probably for sins of his own or of his ancestors, had been taken possession of by an evil spirit. The only hope of cure was, so to speak, to bully the demon out of him by portentous exorcisms in

ecclesiastical latin, and worse still, by ill-treatment amounting often to the most horrible torture. Bedlam, with its row of raving madmen, chained like wild beasts to the wall, was a type of the usual mode of treatment.

Even such a great and good man as Sir Thomas More ordered acknowledged lunatics to be publicly flogged ; and throughout rural England there were many what were called bowsening-places, for curing of madmen consisting of deep walled cisterns full of water, into which, as Carew describes it in his *Survey of Cornwall*, "the lunatic was suddenly plunged by a blow on his breast, tumbling him headlong into the pond, where a strong fellow, kept for the purpose, dragged him about till he was quite exhausted ;" when he was taken to church, masses said over him, and if he did not recover he was "bowsened again and again while there remained any hope of life in him."

This simple picture of what was going on every day in remote country parishes of England enables us to realize the practical consequences of the theory of demoniacal possession, better perhaps than an enumeration of the Papal bulls and sermons of eminent divines, which urged the civil to unite with the ecclesiastical authorities and the Inquisition, in rooting out the bond servants of Satan.

The medical men, on the other hand, of whom two out of every three were reputed to be atheists, took the opposite view, that madness was nothing but a form of brain disease, that its victims were rather objects for compassion than for aversion, and that gentle treatment was far more likely to effect cures than exorcisms and tortures.

Here, then, was a distinct issue joined between the Doctors of Divinity and the Doctors of Medicine, between the "theologici" and the "atheï." If the question were to be decided by texts, the "theologici" had it all their own way, and the "atheï" were nowhere. Nothing can be clearer than that Jesus over and over again asserted the theory of demoniacal possession. The demons knew him, he knew them, they conversed together; and he was so well acquainted with their ways that he could tell what sort could only be ejected by prayer and fasting. In the famous instance of the Gadarene swine, a raging madman was cured by evicting a legion of devils, and instead of leaving them homeless on the roadside, as if they had been Irish peasants, allowing them to occupy as caretakers the bodies of more than two thousand unfortunate pigs.

Nothing can be more explicit. Orthodox Christians were quite right in struggling to the last against a theory of lunacy which was in such direct contradiction with the express words of Scripture and of Jesus himself. We cannot wonder at Bossuet preaching his two great sermons, "Sur les Demons"; and John Wesley insisting that "most lunatics are really demoniacs," and that "to give up witchcraft is to give up the Bible, and to take ground against the fundamental truths of theology."

There cannot be a clearer illustration of the logical strength of Dr.

Wace's formula, that if you believe in the inspiration of the Bible and in the Divine nature of Jesus, you must believe these things, or make him out to be a liar—I may add, a liar of the worst description, for if he were Divine and Omniscient, he must have known not only that he was fostering a delusion, but that this delusion would be in future ages the cause of misery and torture to thousands of the most helpless of the human race. But I reply, not without some little tone of indignation, "It is you, not I, who makes Jesus out to be a liar; it is your assumption of Divine inspiration and Divine nature which defaces the pure and noble image of the Man Jesus, and places us in the alternative of either believing incredible things, or making him out to be an utterer of falsehoods. As a man no taint of falsehood or insincerity attaches to him in admitting that he used the language and shared the mistakes of his age and country. But as a God there is ; and a God who teaches theories which are demonstrably false, and which lead to barbarous and revolting practices, is an incarnation not of goodness, but of evil."

For the theory of demoniacal possession is demonstrably false. If, instead of appealing to texts, the appeal is made to facts, the verdict is reversed; it is the "atheï" who hold the field, and the "theologici" who are nowhere.

Which cure or alleviate the larger number of cases of lunacy—exorcisms and tortures, or gentle treatment? Which is most in harmony with the best instincts of human nature—love, charity, mercy, and compassion, Hanwell, with its harmless and happy inmates, or Bedlam, with its row of chained wild beasts? If a doctor of Divinity says of a lunatic that he is possessed by a devil, while a Doctor of Medicine says he is suffering from a lesion of the brain; if the lunatic dies, and his brain is dissected, which do you find, the devil or the lesion? Nay, has not medical science gone so far that you can often predict the exact spot where the pressure on the brain is taking place, and by an operation remove the tumor, and restore the patient to reason?

If these things are true, and if the modern treatment of madness is really an improvement on the old one, it is quite clear that we are indebted for the change to scepticism, for it was impossible as long as the authority of Scripture was held to be the supreme tribunal, superior to fact and reason, and whose dicta it was impious to dispute. Montaigne, Hume, Voltaire, and a host of what used to be called infidel writers were the precursors of Pinet and Tuke; and with Galileo, Newton, and the triumphs of modern science, created the purer sceptical and scientific atmosphere of the present age, in which the masters of mediæval theology simply die out like the Saurians of the secondary period, leaving a few fossil remains and degenerate descendants.

Witchcraft affords another test case in which the humanizing influence of scepticism is most apparent. Down to a comparatively recent period the belief in witchcraft was universal, and whole hecatombs of miserable

victims were sacrificed to a superstition which is no less barbarous and degrading than that which exists to the present day in Dahomey, and among the cannibals of Central Africa. Why? Because the texts of what was supposed to be the inspired Word of God explicitly asserted the reality of witchcraft, and contained the command—"Ye shall not suffer a witch to live."

The case is the same as that of the belief in demoniacal possession as the cause of lunacy, except that the treatment of witches was even more cruel than that of lunatics, being founded more on texts of the Old Testament, dating back to a barbarous age. It was a form of cruelty also for which Protestants were even more responsible than Catholics, its worst excesses occurring in Protestant countries after the Reformation. In Germany alone, it is estimated that in the great age of witch-burning which followed that event, more than 100,000 persons perished by an excruciating death in the course of a single century.

On a smaller scale, one of the worst and latest out breaks of the witch-burning epidemic occurred in Puritan Massachusetts at the close of the seventeenth century, incited and fanned into a flame by the efforts of the Mathers and other leading Calvinistic divines. Hundreds of innocent men and women of good characters were tortured into confessions, or convicted on the testimony of private enemies and professional witch-hunters, and perished in the flames, as was clearly proved when the epidemic subsided, and reason began to resume its sway, though divines like Cotton Mather held out to the last, and groaned over the evil spirit of unbelief which had thwarted the glorious work of freeing New England from demons.

Nobody now believes in witchcraft, and foolish old women and hysterical young ones may talk as much nonsense as they like without fear of being burned alive. Surely the world is the better for this; but how has it been brought about? Not that the texts have become more ambiguous, but that people have ceased practically to believe in them. I say *practically*, for there are a good many who still retain a sort of half-belief, and who would be shocked either to confess that the Bible is not inspired, or to say, with John Wesley, that "to give up witchcraft is to give up the Bible," but as the Ichthyosauri died out, and left harmless lizards as their successors in the purer air of the Tertiary era; so this, with other barbarous superstitions, has lost all real hold on the minds and consciences of those who, happily for themselves, live in the atmosphere of a scientific and sceptical age.

If the idolatry of Scriptural texts has caused so much human misery in the case of lunacy and witchcraft, the same idolatry, expanded from texts into dogmatical creeds and confessions, has been even more destructive in the case of heresy. Heresy, or the holding of different beliefs from those of the Church, is either a harmless and necessary incident in the use of human reason, or it is an act of pernicious and contagious wickedness

which it is the duty of the State to aid the Church in stamping out. This depends on whether we do or do not believe the Creeds. If we believe the Athanasian Creed, which contains the fullest summary of the articles of the Catholic faith, and which is still retained in the Anglican ritual, all men will "without doubt perish everlastingly" who do not believe in every single article of that remarkable Creed. What right have we to rail against Torquemada, or blame Calvin for burning Servetus, if we really believe this to be true? They were simply carrying out, conscientiously and logically, the principles to which all orthodox Christians profess to adhere. Surely if it is right to stamp out the cattle plague, it must be still more right to stamp out a moral cattle plague which is eminently contagious, and which beyond all doubt causes those who contract the disease "to perish everlastingly." There is no possible answer to this, except that we do not believe the Creeds; that we feel the burning of men for differences of opinion to be cruel, and the suppression of freedom of thought to be mischievous. In short, that our attitude has become that of the poet who says—

"There is more life in honest doubt,
Believe me, than in half the Creeds."

If this is not "scepticism," I do not know what the meaning of the word is.

We live, fortunately, in an age when scepticism has so effectually killed the class of ideas which led to persecutions for heresy, that we have almost forgotten what the Inquisition and the fires of Smithfield really were. From first to last, hundreds of thousands of victims perished in horrible tortures for the crime of thinking for themselves. There is hardly a man of light and leading of the present century who would not have been sent to the stake if Spain had conquered England, and the integrity of the Catholic faith had been enforced by the civil power, or if Calvin had ruled in England as he did in Geneva. Darwin, Huxley, and Herbert Spencer would certainly have been burned; Carlyle, George Eliot, Byron, and Shelly would have shared the same fate; and Dean Stanley, Bishop Temple, and the whole Broad Church would have been in imminent peril. Spain, where the Inquisition so long reigned supreme, is an instance not only of the devilish cruelty which a misplaced religious earnestness can inspire, but of the inevitable political and social decrepitude which follow from successful attempts to stamp out freedom of thought.

Religious wars were only an outcome on a larger scale of the ideas which inspired religious persecutions. At bottom it was a firm conviction by those who held one set of opinions, that those who held different ones were miscreants, enemies of the human race, who ought to be forcibly converted or exterminated. Given the conviction, the persecutions and wars followed as a matter of course, or rather of conscience. Destroy it,

and the persecutions and wars cease. We no longer persecute and go to war in the name of religion. Why? Because the age has become too liberal, enlightened, tolerant, and humane. And why has it become so? Because scepticism has triumphed over orthodoxy. That the age has become more sceptical, and that faith in the old hard-and-fast lines of orthodox religion has declined, are facts which all acknowledge, though some deplore. It is evident, moreover, that these two facts are not merely concurrent, but stand to one another in the relation of cause and effect. It is a case not merely of *post hoc* but *propter hoc*. Voltaire, who may be taken as the representative of the literary scepticism of the last century, was inspired in his attacks on orthodoxy by his indignation at one of the last "autos-de-fé," or acts of faith, in the burning of a heretic. His shafts of ridicule wounded the monster to death more effectually perhaps than could have been done by solid arguments. The name of Darwin, again, may be taken as the representative of the scientific scepticism which has effected the greatest revolution of thought in the history of the human race, and substituted the idea of original impress, acting by unvarying law, for that of secondary supernatural interferences with the course of Nature. No educated man any longer believes in the sense in which our forefathers believed the Bible, and in which Mahometans still believe in the Koran. The assured faith in the Bible, as an ultimate and exhaustive record written by God's finger, has vanished never to return, and has quite lost its power as a practical factor in the life of nations. We retain our affection and reverence for it, from old associations, and as containing many beautiful and excellent things, but we no longer make it an idol. We criticise it freely, and find it to be a collection of various writings of various ages, by unknown or doubtful authors, and containing, with much that is of the highest truth and highest interest, much that bears evident traces of the ignorance, superstition, ferocity, and immorality of the rude and barbarous ages over which its traditions extend. No one now would think of appealing to every single text of Scripture as an ultimate tribunal from which there was no appeal, or, like the Caliph Omar, burning all the other books in the world because, if they agreed with the Bible they were superfluous, and if they disagreed with it, mischievous.

A better proof cannot be afforded of the extent to which ecclesiastical religion has ceased to be a motive power in human affairs, than by a reference to the great wars of the last half century. By an irony of fate, the first great exhibition in Hyde Park, which was thought to have inaugurated an era of peace, has been, like opening the temple of Janus, the signal for a series of the greatest wars recorded in history; wars great not only in the magnitude of the scale on which they were waged, but in the momentous importance of the issues involved. In all these wars the element of religion was entirely absent, and in its place was supplied by the new element of Nationality. The net result of these wars has been

the consolidation of a great Germany, a great Italy, and a great United States. Everywhere people of the same race, speaking the same language, and having a common literature and common interests, however broken up and divided into fragments by internal dissensions or foreign foes, have tended with irresistible force to consolidate themselves into great nations. Even the weaker races—the Greeks, Roumanians, Servians, and Bulgarians—have felt the same impulse, and the half-satisfied aspirations of the Eastern Christians constitute the peril of Europe, and threaten us with the impending shadow of another war. Nearer home, Irish nationality is the root of our Irish difficulty. We have taught the Irish people to read and write, we have given them a free Press and Parliamentary institutions, and the result is that they claim an increase of self-government and recognition of their separate nationality which we hesitate to concede, because we fear that it would destroy the old system of English ascendancy, and subvert many of the settled principles of English law, especially as regards the tenure of land and the rights and duties of landlords. If we have saved our colonial empire, it is only by conceding with the freest hand to Canada, Australia, New Zealand, and South Africa all that we once contended for, and giving them the fullest scope to work out their destinies as independent communities, attached to the mother country by ties of common interest and affections, rather than by the hard-and-fast lines of superior force.

Now in all these great movements it is remarkable that ecclesiastical religion has not only been an appreciable factor, but that in many cases they have gone on in the teeth of whatever influence it might be supposed to have remaining. In Italy, the head-quarters of ecclesiastical authority, the Pope, though still the venerated head of millions of Catholics, has been utterly powerless when opposed to the idea of Italian nationality. The Catholics of South Germany fought as stoutly at Gravelotte and Sedan, shoulder to shoulder with the Protestants of the North, to make a great Germany, as their ancestors did under Tilly and Wallenstein against the ancestors of the same Protestants to secure the ascendancy of their respective Creeds. Austria has to forget the traditions of the Thirty Years' and the Seven Years' wars, and ally herself to heretic Prussia. France has for more than a century been intensely national, and very little religious. Even in Spain a dominant ecclesiasticism died out with the embers of the Carlist insurrections, and Spanish colonies in far-off Mexico, Buenos Ayres, and Chili are entering on a career of progress and prosperity almost exactly as they have emancipated themselves from the rule of priests and adopted modern ideas.

Has this change from religious to national wars been on the whole beneficial? One thing is certain, that war among civilized states has become infinitely more humane. Compare the picture by a military correspondent, of the advance of the Crown Prince's army through France, with the details of the Thirty Years' War, as given in Schiller's

history. In the one case you see French peasant girls standing at the doors of their cottages to see the brilliant staff ride by, and exchanging nods and smiles with the German soldiers ; in the other you have Tilly's Pappenheimers tossing heretic babies on the points of their pikes at the sack of Magdeburg.

The most signal instance, perhaps, of the humanizing influence of modern ideas is afforded by the action of the United States after the close of the great Civil War. A war of unexampled magnitude, costing tens of thousands of lives and millions of money, had been fought out with unexampled determination. The vanquished had begun the war, and in the view of the victors were rebels, but not a single hair of their heads was touched after the contest was over, not a single political prisoner was brought to trial. Jeff Davis was not hanged on a sour apple-tree, and the leading generals and politicians on either side for the most part returned quietly to civil occupations. I sometimes wonder what an historian writing a century hence will think of this record, compared with our English one of twenty-five members of Parliament imprisoned as common felons for political offences. To pursue this further would, however, lead me too far towards the burning region of contemporary politics, and I content myself by drawing this conclusion. If the spirit of the age be really sceptical and democratic, as all admit and many deplore, then scepticism and democracy must be included among those "*ingenuas artes*" of which the Roman poet says—

"Emollit mores nec sinit esse feros,"

Nor is it in war only that milder manners and a more humane and charitable spirit have accompanied, if they have not been created by, the development of these two great principles of modern society. The air is full of projects, visionary or otherwise, which are all based on the spirit, if not on the letter, of true Christianity, of assisting the poor and suffering, and sweetening the conditions of life. Bismarck and the German Emperor adopt large schemes of State socialism, and aim at a universal insurance of workmen against poverty and old age. Trades Unions, Provident Societies and Savings Banks do the same on an ever-widening scale in English-speaking communities. The old harsh principles of English law, which always sided with the strong against the weak, with man against woman, with landlord against tenant, with capital against labor, are being broken down in all directions. The rigid conclusions of political economy are no longer accepted as axioms. The duties of property, so long ignored, are coming into formidable antagonism with its rights.

So far from impairing the sanctions of morality, moral considerations are coming more and more to the front in this age of material progress. Slavery, long sanctioned by Bible texts and immemorial usage, offends the public conscience and disappears. We began by burning heretics,

burning softened into boycotting, and finally this last vestige of intolerance has disappeared, and we live in an England where,

"Girt by friends or foes,
A man may speak the thing he will."

That world-old though newly-named institution, the "boycott," is no longer applied to differences of opinion, but confined to conspicuous offenders against the unwritten laws of a nation's conscience; to respondents in divorce courts, exceptionally bad landlords, and heartless profigates. The poor are always with us, but we no longer pass them by on the other side like the Pharisee, muttering our ecclesiastical texts and economical formulas. We feel for them, our consciences are touched, a daily diminishing number ignore them, and an increasing number try, in their respective spheres, to assist them by active effort, or sympathize with those who do.

The truth is, that morals are built on a far surer foundation than that of Creeds, which are here to-day and gone to-morrow. They are built on the solid rock of experiences and of the "survival of the fittest," which, in the long evolution of the human race from primeval savages, have by "natural selection" and "heredity" become almost instinctive. Every day of civilized society, working in an atmosphere of free discussion and free thought, tends to make the primary rules of morality more and more instinctive, and to extend and widen their application.

The other charge against the spirit of the age is still more easily refuted. It is said that scepticism has killed spiritualism, and stripped life of its poetry and higher aspirations, while democracy has reduced everything to a dead level of prosaic mediocrity. Those who say so see the reflection of their own souls. The man must be indeed hopelessly commonplace and prosaic, who fails to recognize the grandeur, splendor, and dramatic interest of the events of the age in which we live, and the striking originality of its principal characters. Was there ever in classic or mediæval times such a tragic drama of human life as is afforded by the career of Louis Napoleon. See him in his early years a dreamy youth, dabbling in obscure conspiracies, and musing over vague ideas and destinies connected with the name he bore. Then comes the attempt at Strasburg; the life in London, half Bohemian, half on the outskirts of fashionable society; the ludicrous fiasco at Boulogne; the romantic escape from the prison at Ham. The curtain falls on the first act, and when it rises we find the obscure adventurer clearing the streets of Paris with grape-shot, imprisoning all that is noblest and most respectable in the public life of France, and finally firmly seated on the Imperial throne. He proclaims the Empire to be peace, and he plunges France into four great wars, the Crimean, the Italian, the Mexican, and the Franco-German, all alike senseless in the view of any possible French interest. He inaugurates the system of armed peace and excessive armaments, and

for quarter of a century is the disturbing element in European politics. The attitude of all other nations is, to use the expression of the witty Frenchman, that of spaniels watching the eye of their master at the Tuileries. Then comes the collapse, and in the closing scene we see a wretched creature driving out in a hack carriage from Sedan to give up his sword to the German Emperor, and sitting on a wooden chair with Bismarck, in front of a little wayside cabaret, to discuss the terms of the surrender as prisoners of war of his last army of 120,000 men. What must have been the emotions on that fatal day, hid under the mask of an imperturbable countenance and an eternal cigar. And all the time the man was essentially the same. Kind-hearted, easy-going, utterly unprincipled, vague, moony, idealistic; easily influenced by those about him, and twisted round his finger by a strong and practical nature like that of Bismarck. As his best counsellor and most intimate friend, the shrewd, cynical, polished, and worldly De Morny, once said to me, when the Emperor was in the height of his power, "The world will some day discover that the man has a better heart and a worse head than it gives him credit for."

I have mentioned Bismarck. There is a man indeed, a man such as Europe has not produced since Luther and Cromwell. Think of his career from a wild student, a provincial Tory Squire, training himself by degrees to be first a diplomatist, and then a statesman; startling the starched representatives of the German Confederation at Frankfort by lighting his cigar without the permission of the Austrian Envoy, with the same cool courage and happy audacity which led him to Sadowa and Sedan, and now the founder of the German Empire, the great Chancellor, the arbiter of the peace of Europe. What made him what he is? His solid strength of character, his sagacious sincerity, his keen insight, glancing through the outward show of things into their real essence, and above all, his indomitable courage, which never quailed before hostile parliaments or vacillating emperors, and led him to stake his head on the success of the Prussian needle-gun and Prussian discipline, against the veteran legions of Austria and the showy *prestige* of imperial France.

At the opposite pole from Bismarck is our own "Grand Old Man." Opinions may differ as to Mr. Gladstone's policy, and whether his powerful personality is an element for good or for evil in English history; but no one who is not a purblind political partisan, can deny that, whether for good or evil, he is a grand and striking figure. Where will you find a man of such universal attainments, wide sympathies, and persuasive eloquence? Where look for an intellect which combines such scholastic subtlety with such argumentative power, such a grasp of details, such juvenile energy, and such a fervid white heat of passionate conviction. What a rich and complex nature must it be, which has in it the evolution from the ecclesiastically-minded Oxford student who

was the rising hope of the Tories, to the great financier of Free Trade, the disestablisher of the Irish Church, the statesman who is at the head of all Liberal movements, the man whose eager sympathies side with liberty and with the masses "of our own flesh and blood," from Ireland to Italy. His mind is like the steam-hammer, which can either crack nuts, or mould masses of stubborn iron, and even in extreme old age there are no signs that his natural vigor has abated.

There is another striking personality of our times, whom, at the risk of offending political prejudices, I should like to mention, the "uncrowned king of Ireland"—Parnell. I am accustomed to call him the Irish Bismarck, for in many of his essential traits he resembles the iron Chancellor. Here again I pass no judgment as to his aims and policy, but look simply at the man and his career. What a career it has been! A young man with no special gifts of position or fortune, little likely as a Protestant and a landlord to enlist the sympathies of the Irish race, gifted with no showy qualities of oratory, the very antipodes of the former great Irish leader, O'Connell, silent, self-restrained, reserved, I may almost say, unsocial. I recollect this young man when I first knew him in the House of Commons, an obscure member even of his own Home Rule party; one of a little knot of five or six Irish members, who thought Isaac Butt's leadership too tame, and whose ruling idea was to force the attention of the House to Irish grievances by organizing obstruction. They succeeded, and soon became very conspicuous, and intensely obnoxious. Step by step Parnell came to the front, and first rivalled and then displaced Shaw in the leadership of the Irish party left vacant by the death of Butt. Like Carnot he organized victory, and even more than Bismarck, forged his own weapons as the strife went on. For Bismarck had his sturdy emperor, his admirable Prussian army, and his great strategist, Von Moltke, made to his hand; Parnell had nothing but what he made himself. His strength of character, practical sagacity, and far-seeing insight, by degrees gave him an ascendancy which secured him the support of the great majority of the Irish race at home and abroad, enabled him to wean them from impossible dreams of rebellion and revenge, to the practical policy of constitutional agitation; and finally has placed the return of some eighty-five out of one hundred and five members for Ireland in the hollow of his hand, and what was apparently more hopeless, has silenced the conflicting jealousies and interests which, in former days, marred all Irish movements, and drilled these eighty-five members into a compact body, acting as one man, under the control and advice of their leader. He has thus, almost single-handed, advanced Home Rule from being a dream as wild as the restoration of the Heptarchy, to be the burning question of practical politics. He has got four-fifths of Ireland, two-thirds of Scotland and Wales, and the bulk of the Liberal party in England on his side, and few dispassionate observers can doubt that, whether for good or evil, the realization of the main features of his policy has become a question

of more or less, and of sooner or later, rather than of absolute and permanent rejection.

This is a good deal for an undergraduate of Magdalen to have done before he has passed the meridian of middle life, and to have done it for a hopeless minority, an unpopular cause, and a down-trodden race, by sheer force of individual character. Of the epithets which their contemporary age has attached to these three leading personalities, the "Great Chancellor," the "Grand Old Man," and the "Uncrowned Irish King," I think there is little doubt that the Macaulay of a future century will find them to have been justly applied, and that without reference to the success or failure of their work which is in the womb of the future.

It would not be right to close the list of the great political personalities of the day without saying one word of Abraham Lincoln, one of the greatest, as he is certainly one of the most original and interesting of modern statesmen. Wise, far-seeing, steadfast, simple, and noble, as Washington, he had a fund of genial humor, and a touch of the quaintness and eccentricity of the old Illinois rail-splitter, which endears his memory to the affectionate respect of all classes of English-speaking men, and makes him a bright example for all time of the height of heroism to which a self-taught working-man of the new democracy may attain.

If we turn from what may be called the epic of modern history to its romance, what figure can be more original and interesting than that of Lord Beaconsfield. What a career, from a second-rate novelist and dandy about town, seeking notoriety by resplendent small clothes, to become the minister of a great country, the favorite of sovereigns, the superior of Dukes, the champion and hero of a proud aristocracy and of a great historical party. And yet, as the novel of his last years shows, essentially the same man throughout. Brilliant, audacious, a master of phrases, and believing in them as stronger than facts. A sort of glorified Gil Blas, or hero of a Spanish comedy ; and yet with qualities which endeared him to friends, captivated the popular imagination, and enabled him to play his part to perfection in all the varied vicissitudes of his extraordinary career. Infinite cleverness, infinite courage, infinite self-possession, and at bottom a genial and artistic temperament, which made him always, whatever else he might be, a finished gentleman. No one ever heard of him, whether as leader of a Government, or as leader of an Opposition, doing a coarse, vulgar, or ungentleman-like thing. He never lost his temper ; he fought, like a courtly duellist of one of Dumas' romances, with the keen rapier of polished sarcasm and pungent epigram, but he fought fairly and left the coarser work, the flouts and jeers, to titled subordinates. His ideas, if vague and visionary, were always grandiose, and according to his lights, imperial and patriotic. He had no prejudices, and although the leader of bucolic squires and favored guests of ducal drawing-rooms, he was fully convinced that Toryism could only survive

by becoming democratic. Here surely was a product of the age as piquant and original as any to be met with in the romance of history.

I turn gladly to the serener regions of science and art. Here also, while we find everywhere the influence of the spirit of the age, we find everywhere genius and originality of character. It is the age of science; its marvellous triumphs have given man an undreamt-of command over the forces of nature, and revolutionized his ideas both of the material and of the spiritual universe. But what I wish principally to remark for the present purpose, these triumphs have been achieved, not by a mechanical process of second-rate specialists working each in his separate groove like wheels and pulleys in the mill of progress, but by a succession of great men, worthy leaders of great events. Take Darwin, the greatest of all. Who in the school-boy scolded by his master for wasting the time which should have been devoted to hexameters in trying rude chemical experiments and collecting beetles, could have foreseen the great philosopher who was to revolutionize the whole course of modern thought? At college he was, like many another careless student, thinking more of partridge-shooting than of books, and looking forward to taking orders, and becoming a college don, or vicar of a country parish. But his beetle-hunting saved him, it brought him into connection with men of science at the University like Henslow, and the merest accident led to his being appointed as naturalist to accompany Captain Fitzroy in the exploring voyage of the *Beagle*.

He saw new lands and new races of men, and his mind, rapidly expanding, acquired a storehouse of new facts and ideas which were the germ of his future greatness. See him next a martyr to ill-health in his quite cottage in a secluded Kentish village, thinking out his ideas, trying simple experiments, clipping out extracts, and patiently collecting information; until one day he woke to find himself famous, and to have his name associated with the greatest revolution ever known in man's conception of the universe. In less than forty years "Darwinism," that is evolution by unvarying law, superseded "Supernaturalism," or the theory of a world created and maintained by a succession of secondary interferences, as completely as the Copernican theory superseded that of Ptolemy.

Before he died he could see all educated thought, all men of light and leading in all countries, converts, if not to all the details, to the leading ideas and facts of his world-wide theory. And what a simple, noble character he was. Patient, candid, magnanimous, modest, loving and beloved in all intercourse with family and surroundings down even to his little dog, faithful friend, single-minded worshipper of truth, one might say that, apart from his fame, here was a model man of the nineteenth century, and if scepticism can give us more like him we may well be content to take what the outcome of a sceptical age has in store for us without much apprehension.

And if Darwin was the Napoleon of science, what a brilliant array of

marshals marched under him at the head of its various divisions—men not of one idea and cramped intellects, but large-minded men of genius and originality, men such as Lyell, Huxley, Herbert Spencer, and a host of others.

Take Huxley as a typical instance. If he had never made a discovery in science, he would go down to posterity as the greatest master of style and best writer of English prose in the whole range of modern literature. To a wit keen as that of Voltaire he adds a far greater range of accurate knowledge and force of pungent logic; his grave irony and undercurrent of genuine humor are delicious, and every sentence goes straight to the mark like a rifle-bullet. In controversy he is like a sun-god shooting his arrows of light through the thickest cuirass of ignorance and prejudice. Given something to say on a theme of science or philosophy, and I know of no writer, past or present, who can say it as well as Huxley.

Of all these, and of the hundred other names which might easily be added to the list of generals and captains of the army of modern science, it may safely be said, that as a rule they lived true, simple, and noble lives, giving no cause of scandal or offence to the world, and showing that the high-priests of truth need not fear a comparison as regards character and conduct with those of any stereotyped and formalized religious creed or caste.

The remaining complaint of the pessimists, that the world is becoming uninteresting and prosaic, is easily disposed of. I reserve for another essay what I have to say as to the creeds of the great poets, but for the present it is enough to ask whether Byron and Shelley were believers or sceptics, and whether their poems show any falling-off in the poetic faculty? Swinburne, whatever we may think of him otherwise, has the gift of word-music and of brilliant imagination in an eminent degree; and Victor Hugo, though too turgid and rhetorical for an English taste, strikes a powerful lyre whose chords resound loudly in the souls of his sceptical countrymen. Above all, Tennyson, the great poet of modern thought, attains a height of inspiration which has been seldom if ever equalled. I care not what his creed may be, but he is thoroughly the man of his age, imbued with its science, from which many of his noblest similes are drawn, and a sharer in its strength and weakness, its hopes and fears, its grandest aspirations, and its blankest misgivings. The stanzas in *In Memoriam*, which conclude with the solemn words, "Behind the Veil," are the profoundest expression of the deepest thoughts of the most earnest minds of the nineteenth century.

In fiction, we have a hundred writers and a thousand readers, of works of a fairly high standard of excellence, for one of former centuries. Nothing gives me more hope for the future of that inevitable democracy which is advancing on us with such rapid steps, than the multitude of standard works which are circulated in cheap editions. Shakespeare, Walter Scott, Dickens, Thackeray, George Eliot, as well as works on history, philosophy,

and art, like those of Macaulay, Carlyle, and Ruskin, are published in ever increasing numbers and at ever lower prices. Who reads them? They must be bought by hundreds of thousands, or it would not pay to publish them, even in pirated editions like those of America. They must be read by millions who never read before, but who now read with intelligent interest for education and self-culture.

If we turn to painting we find the same phenomenon. It is becoming more popular and more democratic. Prints and chromo-lithographs hang on the walls of every cottage; illustrations, often admirable, like those of the modern school of wood-cut, adorn the pages of pictorial newspapers and magazines, and have become almost a necessary accompaniment of every work of wide circulation. And how has this affected the higher class of painting? Has it become more prosaic? Distinctly the reverse, it is far more poetical; that is to say it aims far more at expressing the real essence and typical spirit of the varying moods, whether of external or of human nature. The contrast between the modern French school and that of conventional classicism affords the best instance for my present purpose, for France is *par excellence* the country whose scepticism and democracy may be supposed to have killed poetry. Compare a landscape of Corot's with a landscape of Poussin, which is most poetical? Or take Millet, who has caught for all time the type of the true French peasant, with his simple or even sordid surroundings, his narrow horizon as he bends with an almost ferocious intensity of labor over his paternal clods, yet illumined by gleams of humble poetry, as in the *Angelus*, or of pure domestic affection, as in *Teaching the Baby to Walk*. Surely this is real poetry, and worth a thousand of the academic pictures of the school of David.

In the English school of art, the same tendency is manifest. All the great modern masters aim at representing types and ideas rather than traditional conventionalities or prosaic realities. Thus Millais' *North-West Passage* and *Boyhood of Raleigh* give us the essence of that spirit of maritime adventure which has made Britannia rule the waves; Faed's pictures of humble Scottish life are as tender and true as if they were poems of Burns transferred to canvas; Peter Graham, Brett, and Hook paint the sea as it never was before painted, in all its moods of strength, repose, and of the joyous freshness of its rising flood. And so of a host of others. They aim at and often succeed in painting pictures which are really poems, true and touching phases of human characters, types of nature which speak to the varying emotions of the human soul, and their masterpieces find a ready response in the hearts of millions.

All this does not look like the advent of a drab-colored age of prosaic mediocrity; or as if the fresh bracing breeze of modern science and free thought, sweeping through the confined air of mediæval cloisters, were going to do otherwise than sweeten and purify the atmosphere, and make the blue of heaven more blue, the grass greener, and the earth, on the whole, a better and more genial place for man to live in. Blow,

brave North-Wester! sweeping over the free and boundless ocean of Truth, chilling to worn-out creeds and decrepit superstitions, but filling the lungs with ozone, bracing the nerves and brightening the eye.

“ Who loves not knowledge, who shall rail
Against her beauty ? may she mix
With men and prosper, who shall fix
Her pillars; may her cause prevail.”

CHAPTER XI.

CREEDS OF GREAT POETS.

WHAT is a poet, and what is a great poet? A poet I take to be one whose nature is exceptionally susceptible to impressions from the surrounding universe, especially those of a character which comes within the domain of art, and who unites with this a certain musical faculty and command of language, which enables him to translate these impressions into apt and harmonious verse. The poet's brain may be compared to a photographic plate which is extremely sensitive and retentive of images which flash across it; or to a delicate Æolian harp which vibrates responsive to harmonies of nature, unheard, or only half-heard, by the coarser fibres of ordinary mortals.

This of itself, where it exists in an exceptional degree, may make a pleasing or even a considerable poet, but to make a great poet something more is required. To this fine susceptibility and musical nature must be added a great intellect; an intellect capable of casting flashes of insight into the varying phases of human character, and the deepest problems of man's relations to the universe; an intellect so imbued with the spirit of the age and abreast of the knowledge of the day as to be able to sum them up in a few glowing lines which embody their inmost essence. Such poets are extremely rare. Of the ancient world, Homer, Æschylus, Sophocles, and Euripides of the Greeks, Lucretius and Virgil of the Romans, still shine as stars of the first magnitude among the "stars of mortal night," though dimmed by distance and seen under greatly altered conditions. Of moderns, I hardly know that the very first class can be assigned to other names than those of Shakespeare, Dante, Milton, Goethe, Burns, Wordsworth, and Tennyson. Many come near it from exceptional excellence in some of the qualities which are most essential to true poetry. Shelley, for instance, is equal to the very greatest in the exquisite susceptibility to all that is beautiful in nature, and the faculty of reproducing it in the loveliest and most musical of lyrics. His *Skylark* and *Cloud* may well stand as the high-water mark to which lyrical poetry has ever attained. But he was cut off at an early age, before his intellect had got over the stage of youthful effervescence, and settled down into the sober and serene wisdom requisite to reflect truly the spirit of an age, and guide a world towards better and higher things. He and Keats have given us "things of beauty" which are "joys for ever," but scarcely wise counsels

and consoling words, to enable us better to live our lives and face our destinies. The same may be said of Byron, the vigor of whose verse and vividness of feeling and description are unsurpassed, but whose ideal of life and character, be it real or be it affected, is about the last any one would do well to follow.

Of living poets Tennyson alone comes up to the highest standard. Others approach it on different sides, but on special sides only, and fail as conspicuously in many of the attributes of the highest poetry as they excel in others. Swinburne, for instance, almost equals Shelley in the exquisite musical susceptibility of rhythm and language, but the ideas behind the words are for the most part rhetorical, and exaggerated, like those of his prototype, Victor Hugo. Browning again has intellect and insight, but his style is so rugged and obscure that to read his poetry is almost like trying to solve chess-problems. He is to Shelley or Tennyson what Wagner is to Rossini or Beethoven; caviare to the multitude, and almost outside the range of the true art which is based essentially on the beautiful.

Of other well-known poets, Pope is a great master of the art of weaving appropriate words into harmonious verse, and his ideas are for the most part clear and sensible. But they are not profound, and in his chief philosophical work, the *Essay on Man*, he rather reflects, with point and precision, the somewhat conventional and commonplace views of the average intellect of his age than gives flashes of insight drawn from his own inward struggles and experiences. The same may be said of Dryden, who had a singular gift of terse and vigorous expression, which has made so many of his lines survive in the form of standard quotations. But he was hardly a deep and original thinker, and however much we may admire his poetry we learn little from it.

Coleridge I hardly mention as a poet, for his principal work, as a religious philosopher influencing to a certain extent the spirit of his age, was done in prose and in conversation. His *Aids to Reflection* was long the text-book of the advanced thinkers of Anglican theology, but his *Christabel*, *Kubla Khan*, and *Ancient Mariner*, admirable as they are, are little more than the dreams of a gorgeous imagination. They might be the visions of an "English Opium-Eater," in the earlier stages of the seductive drug as described by De Quincey.

Of the early English poets, the names of Chaucer and Spenser stand out pre-eminent. Spenser, indeed, has perhaps as large a share as any other, even of the greatest poets, of that which is the substratum or first requisite of all true poetry; the exquisite susceptibility to all that is beautiful in the surrounding universe. But his philosophy does not go much beyond an allegorical representation of vices and virtues as they appear in the abstract, rather than in the concrete form of living individuals. Compare Una, who is his most distinct and lovable character, with Imogen, and you feel at once that Shakespeare gives you a living woman, in contact with an actual world; while Spenser's embodiment of nearly

the same ideal is shadowy and mystic, half woman and half allegory, living in a world of impossible giants and monsters.

Chaucer, on the other hand, stands on solid earth, and deals with real characters. In the dramatic faculty of depicting actual living men and women he has no rival except Shakespeare, and is inferior to him rather in the narrower width of his canvas, and in the complexity and variety of the characters depicted, than in the truth and vividness of the portraits themselves. In his *Canterbury Tales* we have the real England of the reign of Edward III. brought before us as distinctly as if we had been one of the company assembled at the Tabard, and had ridden on the Dover road to the shrine of St. Thomas, with the worthy knight, the dainty and soft-hearted abbess, the jolly wife of Bath, and the other typical representatives of the various classes who made up what was the framework of English society in the fourteenth century. How like they are to us, how completely we feel that they are our own flesh and blood, and that five centuries have made but little change either in human nature itself, or in the special form of it which may be called English nature.

In reading Chaucer I am also struck by the wonderful anticipations of the most advanced modern thought, which occasionally crop up in the most unlikely places, and which only require to be translated into modern language to be at once recognized. For instance, I came across a passage the other day which, if expressed in the terminology which would now be used to convey the same ideas, would read as follows—

“The inscrutable First Cause of the universe knew well what he was about when He established the fair chain of love or of mutual attraction. For with this chain He bound the elements, fire, air, water and land together in definite forms so as not to fly asunder into primeval chaos.

“In like manner He established certain periods and durations for all creation beyond which nothing could pass. This needs no authority to confirm it, for it is proved by universal experience. Men, therefore, by this order of the universe may easily discern that the laws of nature are fixed and eternal. And any one who is not a fool can understand that as every part is derived from a whole, nature cannot have originated from any part or parcel of a thing, but from something that is perfect and stable, passing by evolution from the homogeneous into the heterogeneous, until it becomes subject to change and corruption. The Creator of the universe has therefore in His wise Providence so established its order, that definite pieces and progressions of things shall not be eternal, but come into existence and pass away in due succession.

“Thus the oak which grows so slowly and has so long a life, at last wastes away and dies. Even the hard rock in time wasteth away; broad rivers run dry; great cities decay and disappear; and all things have an end. So also of the human race. All die; some in youth, others in old age; kings as well as commoners; some in their beds, some in the deep sea, some in battle-fields.

"There is no help; all go the same way; all die. What causes this but the Ruler and First Cause of all things, who draws back into His own essence all that was derived from it, against which decree it availeth no living creature to strive. Therefore it seems to me to be wise to make a virtue of necessity and make the best of that which we cannot prevent; and that a man is a fool who grumbles at that which is the universal fate, and rebels against the law to which he is indebted for his own existence."

If any one came across this passage without knowing its origin, he would be apt to attribute it to some writer who was conversant with the works of Herbert Spencer, Darwin, and Lyell, and about the last guess he would make would be, that it came from the father of English poetry writing in the fourteenth century. And yet if he would turn to the speech of Duke Theseus in the *Knight's Tale*, he would find that it is a literal though modernized version of what Chaucer puts into the mouth of his representative of perfect manhood and mature wisdom. Religions and philosophies have changed, knowledge has increased, but these lines of Chaucer remain as a summary of the best and truest attitude in which a man can face the insoluble mysteries of the universe.

This passage alone should be sufficient to justify Chaucer's claim to rank among the great poets.

My object, however, is not so much to review poetry generally, or to assign to each poet his proper place in the hierarchy of Art, as to ascertain what have been the real creeds, or inmost convictions, of those who, by universal consent, are ranked among the highest. And when I talk of creeds, I do not mean the outward professions, which, with poets as with other men, may be mainly affairs of time and circumstance; but the deeper insight with which they "see into the life of things," and find with Wordsworth—

"The anchor of the purest thoughts, the nurse,
The guide, the guardian of the heart, and soul
Of all the moral being."

In Wordsworth's case the answer is easy; he gives it himself. He finds it in nature. Not in a dead or mechanical nature, or one limited to seas and skies, mountains and rivers; but one which includes

"The still sad music of humanity."

And which lives with

"A presence which disturbs me with the joy
Of elevated thoughts; a sense sublime
Of something far more deeply interfuse
Whose dwelling is the light of setting suns,
And the round ocean and the living air,
And the blue sky, and in the mind of man;
A motion and a spirit that impels
All thinking things, all objects of all thought,
And rolls through all things."

This is very nearly pure Pantheism, and it is remarkable how closely he approximates in other respects to the Oriental philosophy which finds its expression in the religions of Brahma and of Buddha, and which tinged the speculations of Plato. In the *Intimations of Immortality*, he adopts, to a considerable extent, the doctrine of the transmigration of souls, or to express it in modern language, the "Conservation of Energy," applied to the immaterial soul as a distinct and indestructible essence.

The problem of immortality hinges on two questions ; life before birth, life after death. They hang very much together, for if from nothing we came—i. e. nothing in the sense of no conscious personal identity, it is more than probable that to nothing we shall return. Wordsworth, in common with Brahmins, Buddhists, and Platonists, solves this problem by postulating pre-existence.

" Our birth is but a sleep and a forgetting;
The soul that rises with us our life's star,
Hath had elsewhere its setting,
And cometh from afar."

It is remarkable that this pantheistic view of the universe is essentially that of other great modern poets, who in other respects, differ most widely from the calm and self-contained character and serene wisdom of Wordsworth. Byron, in his moments of best and truest inspiration, expresses in still more passionate and vigorous language, the same feeling for one great living whole, comprising nature, humanity, and himself.

" All heaven and earth are still—though not in sleep,
But breathless, as we grow when feeling most;
And silent, as we stand in thoughts too deep—
All heaven and earth are still; from the high host
Of stars to the lulled lake and mountain-coast,
All is concentrated in a life intense,
Where not a beam, nor air, nor leaf is lost,
But hath a part of being, and a sense
Of that which is of all Creator and defence.
Then stirs the feeling infinite, so felt
In solitude when we are least alone: "

And again in the rush of the midnight m he wishes to be

" A sharer in thy fierce and far delight
A portion of the tempest and of thee ! "

Shelley, again, was essentially the poet of Pantheism, and derived all his best inspiration from

" Earth, ocean, air, beloved brotherhood ! "

The song of the skylark, the fleeting cloud, the forest at noonday, the

"Waste and solitary places, where we taste
The pleasure of believing what we see
Is boundless, as we wish our souls to be,"

spoke to him and he to them as living beings, vibrating in unison with the most delicate harmonies.

Of Death he speaks as

"The boundless realm of unending change,"

where

"All that we feel, and know, and see
Shall pass like an unreal mystery."

In other words, his glance of insight into the mysteries of the universe is essentially Pantheistic and Agnostic.

In sharp contrast with the ethereal poetry of Shelley, Burns, while equal to him or any other poet in the exquisite delicacy of his lyrics, stands on solid earth, and teaches what may be called a gospel of practical life. He may not always have acted up to it, but his poetry is pre-eminent in laying down sound and sensible maxims of conduct, and investing common things and ordinary life with a halo of tenderness and dignity drawn from the inspiration of the highest feelings of human nature. Thus, when he says—

"To make a happy household clime
For weans and wife
Is the true pathos and sublime
Of human life,"

he presents an ideal universal in its application, within reach of all, common to all sorts and conditions of men; and he presents it in a way which lifts the fundamental fact of the family tie from the region of prose into that of poetry. The poorest man who lives even approximately, up to these lines, may feel that he has not lived in vain. By industry, prudence, self-restraint, good temper and kindness, he has made his humble home a shrine of affection and happiness, and has made good his title to rank as one of Nature's gentlemen. Goethe means much the same thing when he says that "no man carries it farther than to perpetuate the species, beget children, and nourish them as well as he can." But how cold and ironical does this sound when contrasted with Burns. One is prose, the other poetry; one a criticism on life, the other an incentive to purify and exalt it.

No one equals Burns in the keenness of insight with which he looks through the outer husks and habiliments of things to their real essence. Carlyle's clothes philosophy in *Sartor Resartus* is but a sermon on the text—

"The rank is but the guinea stamp,
The man's the gold for a' that."

A manly independence, based on the qualities which Tennyson attributes to the Goddess of Wisdom,

"Self-reverence, self-knowledge, self-control,"

is to Burns, as it is to every one, the solid basis of all the manly virtues. It is a basis which is more readily provided to those who live by work, whether of the hand or head, than to those who are born with a silver spoon in their mouths, and are cradled in comfort and luxury. A man never knows what is really in him until he has measured himself with his fellows in real honest work. I have known many a man who fancied himself one of the *crème de la crème*, and looked down on the rest of the world as "cads" and "outsiders" who was not honestly worth twenty shillings a week of any man's money. He could ride, but not well enough to be a whipper-in; shoot, but did not know enough of woodcraft or rearing pheasants to be a gamekeeper; dance, sing, or draw perhaps, but nothing well enough to earn a penny by it. Strip him of his cotton-wool wrappings of wealth and rank, and land him at Sydney or Melbourne without a sixpence in his pocket, and what could he do to earn a living? Possibly drive a cab, or be a waiter at an eating house. How can such a man feel the same manly independence as one who knows that, wherever he goes, he has muscles or brains to sell which are honestly worth their price in the world's market.

No one sets forth so forcibly as Burns the dignity of labor, and the compensations which go so far to equalize the lot of the rich and poor. If I wanted to convert to sounder views some narrow-minded social democrat, whose one idea was envy of the rich, I would make him read Burns' *Two Dogs*, where the relative advantages and disadvantages of different stations of life are set forth with so much force and humor. Against the hardships and privations of the working masses, alternating with the enjoyments of the evening rest, the healthy appetite, and the sound sleep, he would read of the non-working classes, how

"Gentlemen, and ladies worst,
With even-down want of work are curst,"

and learn

"It's no in riches or in rank,
It's no in wealth like London Bank,
To bring content and rest.

If happiness has no its seat
And centre in the breast,
We may be rich, or wise, or great,
But never can be blest."

He may learn also from the *Cotter's Saturday Night* how peasant life may rise to the level of patriarchal dignity ; and from *Highland Mary* or *Bonnie Jean* how the romance of love may be as true and tender by the "banks and braes o' bonnie Doon" as in Belgravian drawing-rooms. Nor will the lesson be wanting from *Willie brewed a peck o' maut* and *Auld Lang Syne*, that frank joviality and hearty friendship are not the exclusive appanage of any class or condition of mortal men.

From Burns to Shakespeare is a long stretch, but any attempt to ascertain the creeds of great poets would be incomplete without some analysis of what seems to be the inmost and truest attitude of the greatest of all poets towards the deepest problems of life. In the case of Shakespeare this is not easy to discover, for his genius is so essentially dramatic that his characters speak and act their own lives, and are not mere masks behind which the author discourses to the public. Thus Childe Harold, Conrad, Lara, and Manfred are only Byron himself posing in different attitudes, while Othello and Macbeth, Falstaff and Dogberry, are types of themselves reflecting Nature, and not Shakespeare. All we can say from them of Shakespeare's individuality is, that it must have been wide enough and rich enough to realize, with a certain amount of sympathy, all the varied range of human passions and emotions, strength and weakness, wisdom and folly. Even the humorous drolleries, and rogueries, and sheer imbecilities of human nature are noted and reproduced with a genial smile.

We cannot say that Shakespeare had any resemblance to Falstaff, but we may be sure that he had noted some one like him ; some humorous ton of flesh, unblushing compound of braggart, coward, liar, and glutton, yet who half redeemed these evil qualities by his ready wit and unfailing good-humor, and left us almost sorry for him when he died babbling of green fields in Mistress Quickly's hostelry.

It is only in one or two of his characters that we can discover something of the real Shakespeare himself, projected from within outwards, and fashioned in some mood of his own image. This is the case mainly with Hamlet and Prospero. Of Hamlet I think we may say with some certainty, that no one could have conceived such a character who had not a Hamlet in him. He must have felt the irresolution, the despondency, the metaphysical thought sickly over the "native hue of resolution," the burden of life almost too heavy to be borne, which made a noble nature and high intelligence drift the sport of circumstances, rather than "take arms against a sea of troubles," and incur the pain of coming to a definite decision.

The Sonnets, in which Shakespeare speaks in his own person, reveal a good deal of this frame of mind. The general tone is that of thought rather than of action, with an under-current of despondency and gentle melancholy. Thus, if the 29th Sonnet be really Shakespeare's, what a sermon is it on the vanity of human things, to find the supreme artist of the

world, the man who had apparently led the most prosperous life, who had risen from a poor country lad to be the admired friend of the highest nobles and best intellects of his day, and who had in a few years achieved fame and competence, writing such lines as these—

“When in disgrace with fortune and men’s eyes,
I all alone bewep my outcast state,
And trouble deaf Heaven with my bootless cries,
And look upon myself, and curse my fate.”

Or think of such a man, when recalling his past life to the “sessions of sweet silent thought,” thus summing it up—

“I sigh the lack of many a thing I sought,
And with old woes new wail my dear time’s waste;
Then can I drown an eye, unused to flow,
For precious friends hid in death’s dateless night,
And weep afresh love’s long-since cancelled woe,
And moan the expense of many a vanished sight.
Then can I grieve at grievances foregone,
And heavily from woe to woe tell o’er
The sad account of fore-bemoaned moan.”

No one can mistake the analogy between these Sonnets and the melancholy musings of the Prince of Denmark.

Again, the 66th Sonnet is almost identical with the enumeration of the ills of life which make death desirable in Hamlet’s famous soliloquy—

“Tired with all these, for restful death I cry,—
As, to behold desert a beggar born,
And needy nothing trimmed in jollity,
And purest faith unhappily forsworn,
And gilded honor shamefully misplaced,
And maiden virtue rudely strumpeted,
And right perfection wrongfully disgraced,
And strength by limping sway disabled,
And art made tongue-tied by authority,
And folly, doctor-like, controlling skill,
And simple truth miscalled simplicity,
And captive good attending captain ill:
Tired with all these, from these would I be gone.”

The evidence of this identity between Shakespeare and Hamlet is strengthened if we examine in detail the enumeration of the “whips and scorns of time” which might almost compel a man to suicide. As a general rule Shakespeare’s characters speak with an admirable dramatic propriety of place and circumstance. They say nothing but what such characters in such conditions might have said. But in this soliloquy there are things which Hamlet hardly could have said, and which must be Shakespeare speaking of his own experiences. Thus, the “law’s delay”

would hardly be included among the serious ills of life justifying suicide by any one who had not known it by personal experience. We can hardly suppose the high born and accomplished heir to the Danish throne to have been a party to a Chancery suit, or to have trod for years, like Peter Peebles, the corridors of a Copenhagen Court of Session. Nor was he likely to have suffered from

“ The insolence of office, and the spurns
That patient merit of the unworthy takes.”

If then Hamlet's soliloquy expresses the real sentiments of Shakespeare, we have his judgment on the great questions of death and immortality summed up almost in the identical words of Tennyson—

“ Behind the veil, behind the veil.”

To die is “to sleep—to sleep! perchance to dream.” Death is “the undiscovered country from whose bourne no traveller returns.” There is no assurance, absolutely none! He cannot say with the Materialist, we shall certainly perish, or with the Christian, we shall certainly live.

The character of Prospero affords even a better test than that of Hamlet for ascertaining what were Shakespeare's mature views on these subjects. There can be little doubt that in Prospero Shakespeare has an eye to himself, retiring in the plenitude of his powers from London and the stage, to spend the autumn of his days in a round of domestic duties in his native town. The magic which Prospero abjures can hardly be other than the poet's imagination, and the staff which he breaks and book which he drowns,

“ Deeper than did ever plummet sound,”

the poet's pen, which had bodied forth so many of these airy nothings, and given them

“ A local habitation and a name.”

It is well worthy of remark how nearly this practical solution of the problem of life coincides with that of another of the world's greatest geniuses, Goethe.

The drama of *Faust* concludes by showing how the hero is delivered from the power of evil, and how the sins and miseries of his career while commanding the powers of magic are condoned, by devoting himself to the practical work of real life—reclaiming a waste tract from the sea, colonizing it, and making it the abode of healthy human industry.

The moral is precisely the same in the two cases, that man's true life is the natural and not in the supernatural, or, as Goethe expresses it elsewhere, that “here is your America,”—not in visionary continents across unmeasured oceans, but in doing, as Carlyle phrases it, “the duty that lies nearest to your hand, as the best guide to further duties.”

But Shakespeare, speaking through Prospero, in his farewell address to the world goes beyond the sphere of practical life, and gives us his views of the highest problems of the universe in the well-known lines—

“ And like the baseless fabric of this vision,
The cloud-capped towers, the gorgeous palaces,
The solemn temples, the great globe itself,
Yea, all which it inherit, shall dissolve,
And like this unsubstantial pageant faded,
Leave not a rack behind. We are such stuff
As dreams are made of, and our little life
Is rounded with a sleep.”

If in the case of Wordsworth, I had to remark on the singular approximation of modern poetry to the Pantheistic views of Oriental religions and philosophies, this passage of Shakespeare carries the comparison still closer. It is the pure doctrine of Maya or illusion, which plays such a great part in the systems of Brahma and Buddha. There is no reality but the great Unknowable; all the manifestations of the universe are illusive dreams, rising and falling like mists from the Ocean of the Infinite. Individual existence is but one of these illusions, destined to disappear like others when its “little life is rounded with a sleep.”

Observe that in this latest utterance Shakespeare has gone beyond the phase of thought which dictated the soliloquy of Hamlet. There, death was a sleep indeed, but a sleep in which there might be dreams, an undiscovered bourne where there might be anything. But here there is not merely Agnosticism, but the positive assertion that sleep is all, and that the individual life is absorbed, like everything else, in the great Ocean from which it came, of the Infinite and Absolute.

Goethe's theory of the universe is very similar to that of Shakespeare, but he approximates to the Oriental philosophy rather on its positive or Pantheistic side than on the metaphysical side of Illusion. Thus, in the famous reply of Faust to the simple inquiry of Margaret whether he believes in God, “*Wer darf ihn nennen?*” he says—

“ Who dares to name Him?
Who to say of Him, I believe?
Who is there ever
With a soul to dear,
To utter, I believe Him not?
The All-encompasser, the All-upholder,
Enfolds, sustains He not
Thee, me, Himself? ”

And he goes on to say how the over-arching sky, the solid earth, the ever lasting stars, the depths of human emotion, are but manifestations of the eternal essence, call it what name you will.

" Words are but mist and smoke
Obscuring Heaven's glow."

This is almost identical with Wordsworth's—

" Sense sublime
Of something far more deeply interfused."

In a word it is pure Pantheism. So also is the hymn of the Earth Spirit, who sits weaving the varied shows of the universe—

" And at Time's humming loom prepares
The garment which the Eternal Spirit wears."

It has often been observed to what a little extent religion, that is, the formal religion of theological creeds, appears in Shakespeare's plays. Love, ambition, jealousy, all the various motives which practically influence human conduct and character, are depicted to the life; but religious belief is as completely ignored as if it had no existence. One would have thought that in an age which had witnessed the martyrdoms of Latimer and Cranmer, the destruction of the Spanish Armada, and the innumerable wars and conspiracies of the reign of Elizabeth, almost every one must have been a keen partisan either of the Protestant or of the Catholic persuasion. And yet such is Shakespeare's indifference or impartiality that it is impossible to say to which side he inclined. The only conjecture that has been hazarded is, that he leant towards the old faith, because his friars, especially Father Lawrence in *Romeo and Juliet*, are depicted in a favorable light. But this can hardly be carried further than to show that he was not one of those bigoted Protestants to whom everything connected with Rome was an abomination. On the other hand, we find no trace of it, where it might have been most expected, in ridicule or abuse of the Puritans.

The Puritans were already a considerable sect, and from their bitter hostility to the stage must have appeared to Shakespeare almost in the light of personal enemies. His observant eye could not have failed to notice many of the traits which, as in Butler's *Hudibras*, laid them open to ridicule. Many of his characters, as for instance that of Malvolio, would have enabled him with perfect dramatic propriety to sharpen the shafts of his satire by introducing an element of Puritanism. But he entirely abstains from doing so by a single word or insinuation. Malvolio is a prig, but not a Puritan.

The fact is that patriotism and loyalty seem to have been such ruling motives in Shakespeare's breast as to have left no room for political or theological differences. The dithyrambic and almost Jingoist praises of England which he puts in the mouth of John o' Gaunt and other characters are evidently written *con amore*, and express his real sentiments; and so also are the glowing eulogiums on the "imperial votaress throned in the West." Had he lived a generation later, we may conjecture that

he would have been a Cavalier, and charged with Rupert rather than with Cromwell; but at the first threat of foreign interference he would have been for England, whether under a king, a Protector, or a Parliament.

Perhaps Shakespeare is right, and after all religion plays a less part in the real life of individuals and of nations, than we are apt to assign to it. It becomes important when it happens to coincide with great currents of feeling or opinion which are setting in the same direction, but it has little effect when it runs counter to them. Thus at the present day, we see that the feeling of nationality is vastly more powerful than any differences of religious denomination. Frenchmen, Italians, and Germans are for national independence and greatness alike, whether they are Catholics, Protestants, or Freethinkers, just as English Catholics were Englishmen first and Catholics afterwards at the time of the Armada. Catholic Ireland bows the Pope's rescript respectfully out of Court when it comes in conflict with National feeling, and follows the lead of an "uncrowned king" who is a Protestant. In private life nothing can be clearer than that the Christian theory is, that it is better to be poor than rich; while the Christian practice is, that it is better to be rich than poor. The example of Lazarus and Dives does not prevent the immense majority of mankind from striving to be better fed, better clothed, better lodged, and more independent; and the precept to "take no thought for the morrow" is nowhere in competition with Burns's ideal of life—

"To make a happy household clime
For weans and wife."

An ideal which, under existing conditions, is only to be realized by the constant exercise of providence and foresight. So also nine-tenths of the very men who preach and who repeat the command, "Thou and thy servant shall do no work on the Sabbath," go home to a hot dinner, which compels their cook to do the same work on the seventh as on the other days of the week.

The fact is, that these remote and metaphysical speculations, whether of theology or philosophy, exert wonderfully little influence on practical life. The spiritualist who holds with Berkeley that matter has no real existence, walks on solid earth exactly as does the materialist who believes in nothing but matter. The determinist, who holds that everything is the result of pre-established harmony, or of mechanical necessity, when it comes to practical action differs in no perceptible degree from the believer in free-will, who holds with Tennyson that

"Man is man, and master of his fate."

In either case the practical incentive is that

"Because right is right, to follow right
Were wisdom in the scorn of consequence"

In other words, that the rules of right and wrong, which have become

almost instinctive by the operation of heredity, education, and environment, influence conduct far more than any theoretical considerations as to the origin of morals, and practical life is made up mainly of the conflict between these instincts and the lower inducements of selfishness, sensuality, and passion, which tempt us to disregard them.

Of great poets who may be considered to have drawn their inspiration from theology there are two—Dante and Milton. In the case of Dante, however, it is doubtful whether the phantasmagoria of mediæval horrors in the *Inferno* can be considered as anything more than the canvas on which he has painted his immortal pictures. He is a great poet, from the passionate insight with which he has described contemporary events and characters, his knowledge of universal human nature, his vivid power of description, and the occasional gleams of pity and tenderness which lighten up his gloomy landscape. His inspiration is to a great extent political and personal rather than theological. He loves and hates with the intense vehemence of an exile whose life has been marred by the struggles of contending factions, and who has known the misery of eating the bread of charity, and mounting the cold stairs of haughty patrons. He takes the regions of Tartarus, the tortures of the damned, and the malignity of devils, as he finds them ready to his hand in the popular beliefs of his day, and on this canvas dashes down the vivid impressions and brooding ideas of which his soul is full; and that soul being a great one, the picture is great also.

In the case of Milton, on the other hand, we have an instance of a really great poet, who, "smit by the love of sacred song, derived his inspiration mainly from the Bible and from theology. And if theology acted thus powerfully on him, he in return reacted no less powerfully on it, for the conceptions of Adam and Eve, of paradise, of heaven and hell, and of the whole hierarchy of good and bad angels are derived mainly from his *Paradise Lost*. Specially that of Satan transformed from the grotesque, Pan-like devil of popular mythology into an heroic figure, not less than "archangel ruined," is purely Miltonic. The indomitable resolution with which he opposes his own personality and free will to the buffets of adverse fate, and the decrees of Omnipotence, elevates the horned and tailed "auld Clootie" of vulgar tradition into an heroic figure akin to the Prometheus of Greek tragedy. It may easily be seen from the example of Milton, how readily poetry may pass into mythology in uncritical ages. It was thought by some Greek philosophers that the gods of Olympus were a creation of Homer's. Had Milton's *Paradise Lost* been written before the invention of printing, and transmitted for centuries by the chants of itinerant bards, probably the same thing might have been said of many of the personifications of popular Christianity.

In contrasting the spirit of the Greek tragedians with that of modern poetry, it strikes me very forcibly how much more the element of morality enters into the former. The ground note of Æschylus and Sophocles,

and in a less degree of Euripides, is that of an inexorable and irresistible Fate, based mainly on a vindication of immutable moral laws. This all-powerful Fate grinds gods and mortals alike, regardless of individual lives, and of individual pains and sufferings, merits and demerits. The essence of tragedy lies in the heroic struggles of lofty souls to oppose this inexorable Fate, and either vindicate against it the more immediate laws of human justice and mercy, or, if defeated, to suffer and endure with unshaken resolution. Thus the Thyestian banquet entails a curse on the house of Atreus, which is visited from father to son to the third and fourth generation of those whose ancestor had violated one of the fundamental laws of human nature, and been guilty of cannibalism. The avenging Furies pursue Orestes to assert the eternal law against the unnatural crime of matricide, regardless of the extenuating circumstances which might have induced a modern jury to bring in a verdict of justifiable homicide. So also Œdipus undergoes the extreme of human suffering, regardless of the fact that the homicide of his father and marriage with his mother were committed in total ignorance, and without any taint of what may be called personal depravity. Antigone and Electra suffer, not only when they are free from guilt, but when their lives have been devoted to acts of natural piety. They suffer not for their own sins, but because circumstances have involved them in the train of events and family connections, for which the eternal moral laws require expiation. The spirit of modern poetry is very different. It is based less on Fate and more on nature; on nature as it is seen in the outward universe, conceived in the Pantheistic spirit of a living whole, and on nature as shown by the actual course of events and real characters and actions of actual men and women. Virtue is sometimes rewarded and vice punished, but not always; characters are partly good and partly bad, just as we see them in the real world; they do not stalk before us on the stage as heroes or demi-gods, in heroic mask and buskin, but tell their tale and act their parts as ordinary mortals, by the play of words, gesture, and of the human countenance. From Chaucer and Shakespeare downwards, the aim of all first-rate poets, dramatists, and novelists has been, not to preach sermons or illustrate views of "fate, free-will, foreknowledge absolute," but to hold up a mirror to nature and reflect it as it really is. Not partially, as in the modern French realistic school, which photographs only that which is ugly and obscene; nor as in society novels, which find nothing in the world but school-girl romance, and the rose-colored trivialities of fashionable circles; but, as Shakespeare did in a supreme degree, the whole real world of nature, which lies within the domain of art, that is, which admits of being illuminated by genius into something which in its final impression is beautiful and not ugly, pleasing and not repulsive.

I have reserved for the last Tennyson, for he is the great poet of modern thought, who stands nearest to us, and who writes with the fullest knowledge of the discoveries of recent science, and of the problems

which occupy the minds of the living generation. In writing of Tennyson I have to bear in mind that he has lived many days, and gone through many phases of thought, and might therefore probably object to be classed in any one category, or represented as consistently holding in his declining years the views which he expressed in his early youth or mature manhood. It is a long journey from the first *Locksley Hall*, where the poet of progress hails with exulting spirit the "wondrous mother age," and sees in his fellow-men

"Men my brothers, men the workers ever working something new
What they have done but the earnest of the things that they shall do,"

to the *Locksley Hall, Sixty Years After*, of the mournful bard who, being old, "thinks gray thoughts," and walks from Dan to Beersheba, finding all things barren. It is not for us to complain that the sun is not always at its meridian splendor, but after having given us light and warmth for its appointed season, sinks, not in the softer glories of a glowing sunset, but behind the gray and clammy mists that obscure the horizon.

Let us take rather our great poet at his best and fullest, in the days when he poured out his inmost soul in *In Memoriam*, and gave the world his views on the deepest problems, in lines which dwell for ever in the minds of the foremost thinkers of his generation. No poet of any generation has struck a deeper or truer note than Tennyson in those noble stanzas in *In Memoriam*, in which he says—

"Are God and Nature then at strife,
That Nature lends such evil dreams?
So careful of the type she seems,
So careless of the single life;

"That I, considering everywhere
Her secret meaning in her deeds,
And finding that of fifty seeds
She often brings but one to bear;

"I falter where I firmly trod,
And falling with my weight of cares
Upon the great world's altar-stairs
That lead from darkness up to God;

"I stretch lame hands of faith, and grope,
And gather dust and chaff, and call
To Him I feel is Lord of all,
And faintly trust the larger hope.

" 'So careful of the type?' but No!
From scraped cliff and quarried stone
She cries, 'A thousand types are gone:
I care for nothing, all shall go.

“ ‘Thou makest thine appeal to me:
I bring to life, I bring to death:
The spirit doth but mean the breath:
I know no more.’—And He, shall He,

“Man, her last work, who looked so fair,
With splendid purpose in his eyes,
Who rolled the psalm to wintry skies,
And built him fanes of fruitless prayer;

“Who trusted God was love indeed
And Love Creation’s final law—
Though Nature, red in tooth and claw
With ravine, shrieked against his creed;

“Who loved, who suffered countless ills,
And battled for the True and Just,
Be blown about the desert dust,
Or sealed within the iron hills?

“No more? a monster then, a dream,
A discord. Dragons of the prime,
Who tare each other in their slime,
Were mellow music matched with him.

“Oh life as futile, then, as frail!
Oh for thy voice to soothe and bless!
What hope of answer or redress?
Behind the Veil, behind the Veil!”

I never read those noble lines without almost a thrill of awe at the intense truthfulness with which they sum up the latest conclusions of the human intellect. Here at last is the *true* truth, based on the inexorable facts and laws of modern science, and on the ineradicable hopes, fears, and aspirations of human nature which underlie them in presence of the “unknowable.” Tennyson has read his Darwin, and understands the facts of “Evolution” and the “struggle for existence.” He has read his Lyell, and knows how the facts of geology show that what is true of individuals is true of types, and that all creation lives and dies, comes into existence, and is transformed, by immutable laws. He sees this as clearly as Herbert Spencer, but, like Spencer, he sees that this is not all, and that underlying these known or knowable facts and laws is a great unknowable, in presence of which we can only veil our faces and bow in reverent silence.

This much, at any rate, it teaches us—that the apprehensions are visionary which tell us that the progress of science and the light of reason will banish all poetry and all religion from the world, and reduce life to an arid and prosaic desert like that of a burnt-out planet. His science furnishes him with some of the most magnificently poetical similes ever penned by mortal poet. The struggle for existence, and apparent cruelty

of Nature, is embodied as the wild eagle, dropping gore from beak and talon, and shrieking with ravine against the creed of love and mercy. The Ichthyosaurus and Plesiosaurus give him the

“Dragons of the prime,
Who tare each other in the slime.”

The decay of the old simple paths, the slowly-dying creeds, translate themselves into a deep undertone of the “still, sad music of humanity.” Men “falter where they firmly trod,” doubt whether their churches and cathedrals are not “fanés of fruitless prayer,” and their accepted creeds and solemn services but as the “cry of an infant in the night,” and with “no language but a cry.”

Tennyson's practical conclusion is very similar to that of Shakespeare and Goethe, viz., to place the centre of gravity of human life in the natural rather than in the supernatural. The advice of his Goddess of Wisdom is to cultivate “self-reverence, self-knowledge, self-control;” and without investigating too closely the origin of conscience, to accept it as a fact,

“And because right is right, to follow right.”

In his *Two Voices*, after a deep philosophical disquisition on the Zoroastrian doctrine of polarity, or conflict of two principles, he finds the best solution of the problem in the spectacle of a man walking to the parish church between his wife and child.

This is apparently the last word of religions and philosophies. Work while it is day, for the night cometh when no man can work. Work well and wisely, and when your little day is over go to sleep calmly, accepting with an equal mind whatever fate, if fate there be, that may be in store for you

“BEHIND THE VEIL.”

CHAPTER XII.

ARMED EUROPE.

WHAT an irony of fate the history of the latter half of the nineteenth century seems to one who can look back on the opening of the first Great Exhibition in Hyde Park. It seemed as if the beautiful glass fabric which the genius of Sir Joseph Paxton had raised amidst verdant turf and umbrageous elms, were a modern temple of Janus, in which the nations of the earth had met to celebrate the inauguration of an era of perpetual peace.

Nor were such anticipations altogether unreasonable. A quarter of a century had elapsed since the close of the Napoleonic wars in 1815, without a single war between first-rate powers. The revolutionary hurricane of 1830, had swept over Europe, prostrating for a time thrones and dynasties, but no great war had resulted from it. Even the thorny question of the separation of Belgium from Holland had been settled by diplomacy. Everything pointed to the conclusion that both nations and rulers had become wiser, and come to see that war was always a calamity and often a crime.

Where are those flattering visions now? "*O cæca mens mortalium.*" How little is it given even to the most sagacious mortals to foresee the course of evolution, and how infinitely wise is the aphorism, "Never prophesy unless you know."

Instead of closing the temple of Janus, the Exhibition of 1851 seems to have been the signal for throwing its portals wide open, letting slip the dogs of war, and cheering them on with ever louder cries of havoc.

Since that date there have been eight first-class wars in which great powers have been engaged, large armies brought into the field, and battles fought on a scale equal to the greatest recorded in history.

WARS	NATIONS ENGAGED.
The Crimean,	Russia, France, England, and Turkey.
The 1st and 2nd Italian, .	Austria and Italy.
The Hungarian	Austria, Russia, and Hungary.
The 3rd Italian	France, Austria, and Italy.
The Austria-Prussian . .	Prussia, Austria, and the minor Germanic States.
The Turco-Russian . . .	Russia and Turkey.
The Franco-German . . .	France and Germany.
The American,	Northern and Southern States of the United States.

And in addition a number of second-rate but still considerable wars, such as those of France in Mexico, Rome, and Tonquin; of Prussia and Austria against Denmark; of Russia in Poland and the Caucasus; of Garibaldi in Italy; and of the United States in Mexico.

Of these minor wars England has had its full share. One indeed, the suppression of the Indian Mutiny, almost assumed the proportions of a great war; and in addition, we have had two Afghan wars, the Egyptian war, two Chinese wars, and at least four or five little wars in South Africa and New Zealand.

Confining our attention, however, to the great European wars, there are several remarkable facts to notice. They originated with the Crimean war, which first broke the long spell of peace, and introduced the element of uncertainty and distrust into the relations of the great military powers. They have gone on upon an increasing scale, the warfare of standing armies having developed into conflicts of armed nations. In talking of the armaments of nations, millions have come to mean what hundreds of thousands did fifty years ago, or even down to the date of Louis Napoleon's campaign in Italy. At Magenta and Solferino not above 100,000 men on each side actually confronted one another on the field of battle; while in the Austria-Prussian war, the two armies engaged in the campaign numbered together more than 500,000; and in the Franco-German war the effective force in the field of one power alone exceeded that number. And the process is still going on. The result of these great wars has not been to establish conditions of settled peace, but rather an armed truce, in which all the nations vie with one another in increasing armaments.

There are, or shortly will be, when the latest military organizations are carried out, not less than fifteen millions of soldiers drilled, disciplined, and to a certain extent taken from civil life in the five great military states alone, viz.—

Russia, in round figures	5,000,000
Germany	3,500,000
France	3,000,000
Austria	2,000,000
Italy	1,500,000
	<hr/>
	15,000,000

And the number still tends to increase, while vast sums are expended in new and improved forts, guns, and military railways. It is not surprising that all the countries whose resources are thus strained are accumulating debts and are increasing taxes, in some cases to an extent which threatens bankruptcy and general impoverishment.

And the worst of it is, that, as matters stand, there seems no issue from this *impasse* of progressive armaments and expenditure. Germany and Italy clearly cannot disarm unless France sets the example. Their re-

cently acquired national unity and independence would be in serious danger, if France got so far ahead of them in military preparation as to be able, either alone or in alliance with Russia, to attack them with a superior force. France, again, cannot disarm without resigning herself to the loss of Alsace and Lorraine, and her chance of regaining her position as the leading state in Europe. Nor can Austria disarm unless Russia does so ; and Russia cannot, without resigning all her national and traditional aspirations to be the head of the Greek Christian races whom she has emancipated from the Turkish yoke by a lavish expenditure of Russian blood and treasure, and seeing them and the inheritance of the fast dying Turkish empire, past into alien and possibly hostile hands.

While this state of things continues, disarmament and permanent peace must remain a pious aspiration rather than a question of practical politics. The utmost that can be hoped is to prolong the precarious truce from year to year by the reluctance of any power to precipitate a conflict of such enormous dimensions and uncertain issue. In the meantime, the electricity is accumulating, and thunder-clouds rising ever blacker and higher above the horizon. Will the tension go on increasing, until some accident makes them explode in the thunder-peals and blood-rain deluges of the greatest war the world has ever seen ? or may it be possible, by any diplomatic lightning-conductors, to draw the elements of danger noiselessly to the earth and avert the catastrophe ?

This is a case in which it is peculiarly dangerous to prophesy, depending, as it does, on so many incidents and personalities on which no man can calculate. All that can be done is to appeal to past history, and from this "philosophy teaching by experience," endeavor to draw some deductions which may assist us in arriving at some conclusions as to the causes which have led to this enormous development of militarism among civilized nations, and the main conditions which tend to make any return to pacific relations so extremely difficult.

The first conclusion to be drawn is adverse to the chances of diplomacy being able to relieve the existing tension. For diplomacy was really the "*fons et origo malorum*." The Crimean war, which began the series of great wars, was essentially a diplomatic war. It was not a necessary war, or one arising from the conflict of great national interests, but distinctly a war made for diplomatic or personal objects by three men—the Emperor Nicholas, Louis Napoleon, and Lord Palmerston.

In the case of the Emperor Nicholas, a long reign of absolute power and uninterrupted success, acting on a strong and proud nature, had led to a feeling of arrogance, which made him incapable of yielding an inch in any pretensions which he had once put forward. He had posed too long as the divinely appointed champion of conservatism and protector of the Christian races and of Russian influence in the East, to let Lord Palmerston and Lord Stratford de Redcliffe score a point against him in the trumpety question of the holy places at Jerusalem, even when the

manifest interest of Russia was to play a waiting rather than a forward game.

Louis Napoleon was actuated by purely personal motives. His empire, based on a *coup d'état* and fusillades on the Boulevards, required the *éclat* of a successful war and the prestige of an English alliance to give it permanence and respectability.

Lord Palmerston, again, was actuated by purely diplomatic motives. He was the pupil of Canning, trained in the Foreign Office, and naturally high-spirited and liberal. For years he had been the champion of all liberal movements in the New and Old Worlds, and had everywhere found the Emperor Nicholas his foremost opponent. France under Louis Philippe had deserted him, and, as he thought, played him false, in the matter of the Spanish marriages. He was determined to have his revenge, and alone among English statesmen he hailed the accession of Louis Napoleon as a means of obtaining it. He saw his opportunity in an alliance between England, France, and Turkey to checkmate Nicholas in the East; and, like a true diplomatist, thought more of winning the next move, than of the real interests of the country and the permanent course of events. By his personal popularity, and the popular feeling against Nicholas as the champion of absolutism and destroyer of Polish and Hungarian liberty, he dragged the Court, the Cabinet, and the country with him, and involved us in the French alliance and the Crimean war. He won the game for the moment, but what were the permanent results? He seated a political adventurer in the saddle, who for the next fifteen years kept us and all Europe in hot water. He inaugurated the system of great wars and excessive armaments, and destroyed the feeling of security which had so long been the guarantee of peace. He raised the military prestige of France to the foremost place in Europe, and lowered that of England, for, notwithstanding the valor of our soldiers, their insufficient numbers and the miserable failure of our arrangements for recruiting and transport, made it palpable to the world that we were only playing second fiddle to France. He lowered it indeed to a degree that was to a great extent responsible for the Indian Mutiny, and for our ineffectual attempts to prevent the outbreak of subsequent wars. England, in fact, remained for many years almost a *quantité négligeable* in foreign politics; and Europe, as a witty Frenchman said, for a long time stood in the attitude of a poodle dog watching the eye of its master at the Tuileries.

On the other hand, the ostensible object of the war, the permanent renovation of Turkey as a substantial barrier against Russian encroachment failed utterly, as it was bound to fail, against the irresistible current of events, which makes for decay of the Turkish Empire, and for the emancipation of the Christian races, who are so much more apt for progress and civilization. The old Foreign Office policy of bolstering up the Turkish rule over these races, and opposing Russia at every point in Europe and Asia, was not only a short-sighted, but what is worse, a cynical

and immoral policy. It was a short-sighted policy, because it overlooked the disproportion between means and ends, and made us the catspaw to draw the chestnuts out of the fire for States like Austria, who had a far larger interest in the Eastern question than ourselves. It was a policy sure to fail in the long run, because the idea of regenerating Turkey was purely fallacious. It was a policy which directed our attention from real dangers nearer home from France, to remote, and to a great extent imaginary dangers from Russia in Central Asia. And it was a cynical and immoral policy, for even had it been possible, we had no right to say that Roumanians, Servians, Bulgarians, and Greeks should continue to groan forever under the desolating rule of Turkish pachas, in order to give England some fancied better security against a remote danger of a Russian attack on India.

If we trace the action of diplomacy farther, we find it responsible not only for the first of the great modern wars, but for several of the succeeding ones. By diplomacy, meaning the personal action of the man or men who controlled foreign policy, as distinguished from great national interests or currents of national sympathy. Thus the Franco-Austrian war in Italy and the Franco-German war were distinctly due to the same cause as had been the principal cause of the Crimean war—viz., the necessity felt by Louis Napoleon of giving France a sensational policy and military glory, in order to reconcile it to the loss of liberty. In the case of the Italian war, other motives may have conspired; such as the sympathy of Louis Napoleon with Italy from early recollections, and the fear of assassination by conspirators of the Orsini type. But the motives were purely personal. No one could say that, however desirable Italian independence might be in itself, France had any such interest as to justify spending French blood and treasure in promoting it. On the contrary, as the event has shown, the purely selfish interest of France was opposed to the creation of a strong power on her Southern frontier, who might not improbably become a rival or an enemy.

But if there may have been some mixture of motives on the part of Louis Napoleon in commencing the Italian war, it remains certain that it was worked up to by diplomatic means, and that diplomacy failed significantly in averting it, though every effort was used, and the war was never popular in France itself.

And there can be no question that the last and greatest of the great wars, the Franco-German war, was simply and solely a diplomatic war. The French Emperor had been for some time going down-hill. The startling Prussian victories in the campaign of Sadowa had dimmed the prestige of French military pre-eminence, and it had become apparent to himself and the whole world, that he had been overreached and overmastered by the superior genius of Bismarck. With this decline of his foreign prestige discontent at home had rapidly increased. Gambetta and

a host of the best orators and writers of France were daily thundering philippics against his throne, and undermining it by sarcasms.

The Empress, who had acquired considerable ascendancy after the Emperor's surrender to her in order to avert the scandal of her flight to Edinburgh, saw clearly that victory alone could secure the dynasty, and place the crown on the head of her son. She was therefore keen for war, as indeed she had been for the Mexican war from religious motives, and the frivolous *entourage* of the Court followed her example. The carpet-generals, such as Lebouf, Frossard, and De Failly, were also all for war, and full of the Chauvinistic idea of the invincibility of the French Army, and the marvels of the mitrailleuse and chassépôt. Louis Napoleon himself hesitated, for although he had grown lazy and lethargic with advancing years, he was still too much of a statesman not to realize the risks he ran in staking everything on the issue of a conflict with an army which had crushed Austria in a seven weeks' campaign. But he had lost his best adviser, the shrewd and cynical De Morny; Marshal Niel was also dead, and he had no military authority of sufficient weight to stem the tide. MacMahon was his best general, a gallant gentleman and good officer, but a man of no large views or force of character. Bazaine was a mere fighting bull-dog, of no more capacity than a common soldier.

Yet with all these unfavorable surroundings, war would hardly have been possible without the aid of the diplomatic machinery, which, in the hands of Grammont and Benedetti, envenomed trifling incidents, and led the Emperor step by step over the brink on the edge of which he was hesitating. If the communications between the courts of Paris and Berlin had been conducted through the Post Office by registered letter, instead of through ambassadors, it would have been impossible to inflame the Parisian populace by the invention of imaginary results.

One reflection from a review of these great wars is, that although they originated in the purest personal motives of some three or four individuals, they led to far-reaching results, which their authors were as far as possible from contemplating. The Crimean war fixed Louis Napoleon on the throne. Louis Napoleon's position led him into further wars, the net result of which was to weld Germany and Italy into great nations. The principle of nationality was the great undercurrent of the age, on the surface of which Louis Napoleon, Palmerston, Cavour, and even Bismarck himself, were but as straws showing the direction of the movement they seemed to guide. Of Bismarck only can it be said that he foresaw the movement, and to a considerable extent by his personal character and action influenced the course of events. So true is it that there is a "Providence which shapes our ends, rough-hew them as we may." The modern spirit of nationality is, in fact, the ruling factor in European politics. The "School-master abroad," instead of inaugurating an era of peace, has, in fact, been the principal cause of the modern eras of great

war, and remains to the present day the chief element in the state of unstable equilibrium which necessitates excessive armaments. The press and education have taught all people who have a common race and language, to rush by an irresistible impulse, towards a common nationality. As in industrial enterprise railways tend to amalgamate, stores to supersede shops, and colossal companies to swallow up private undertakings, so in politics, populations who go to school and read books and newspapers, tend to rush together, according to affinities of race, language, literature, and past history, and either form great empires, or, at any rate, assert their independent nationalities. Even the smallest and most remote nationalities feel the impulse, and Greeks, Roumanians, Bulgarians, Servians, Magyars, Croats, and Czecks, agitate for greater independence or wider frontiers, introducing by their agitation an element of risk and instability in all the relations of the Austrian Empire and of Eastern Europe. Still more is the feeling of nationality paramount, where great civilized races, like the Germans and Italians, with a glorious common literature and great historical traditions, refuse to remain longer under foreign rule, or cut up into petty states, in order to give colossal neighbors the pleasure of bullying them with impunity, and insist on taking their natural place among the foremost nations of the world.

Another important fact results from an examination of recent wars. In three of the great wars—the Crimean, the Franco-Austrian, and the Franco-German—France has been the originator and principal party, while of the minor wars—those of Mexico and Tonquin—her aggression was the sole cause. If we follow the course of history farther back, we find this to be no isolated phenomenon, but that for more than two centuries France has been the principal disturber of the peace of Europe; and this in spite of repeated lessons, in opposition to the obvious interests of the French people, and in many cases even to the popular feeling of a majority of the nation, if it could have been fairly consulted. The whole series of wars of Louis XIV., Louis XV., and Napoleon, were undertaken without any rational object, to gratify the vanity or ambition of rulers trading on the appetite of the French for military glory. In the recent wars of Louis Napoleon this was even more conspicuously the case, for it cannot be said of any one of them that it was necessary for any interest of the French nation, or otherwise than unpopular with the mass of the French people. The Crimean and Italian wars were never popular, though they resulted in victories. The Mexican war was so unpopular that it almost forced the Emperor into the last desperate risk of the war with Germany in order to retrieve his position. The latest war, that of Tonquin, was more than unpopular; it was so odious that it led to the return of a formidable minority of Royalists, and has estranged from power perhaps the ablest man of the Republican party, Jules Ferry, for the sole reason that he was responsible for it.

Such a series of historical events, extending over two centuries, cannot

have occurred without great underlying causes in the character and institutions of the French nation, which have enabled individual rulers, and often mere court intriguers and courtesans, to lavish French blood and treasure in such senseless and, in the long run, disastrous enterprises. The causes are not far to seek. Since Cardinal Richelieu crushed the aristocracy and local liberties, France has been a country in which Central Administration was pushed to its extreme limits. The Revolution and the empire of Napoleon carried the levelling process still farther, and tightened the bands of centralization. Whoever gets hold of the War and Foreign Offices, and of the Telegraph, is, for the time being, master of France. Even this, however, would hardly suffice if there were not something in the character of the French nation on which ambitious rulers and aspiring adventurers could rely to give them, at any rate, a temporary support.

The French character remains essentially as it was described by Julius Cæsar—fickle, excitable, and vainglorious. Vanity, or the desire to shine, is the fundamental trait both of the personal and national character. Their emblem is still the Gallic cock.

“ Qui chante bien haut quand il est vainqueur,
Plus haut encore quand il est vaincu.”

I do not say this at all as a matter of reproach. Vanity is a quality which is at the bottom of a great deal that is good. To be amiable, polite, eager to shine and to excel, enthusiastic for ideas, open to novelties, may, within certain limits, be contrasted favorably with the opposite extreme into which we English, and other harder races like the Prussians, are apt to fall, of a surly, arrogant pride, which disdains to please, and looks down on all the world who are outside of their own limited set or nation as inferior mortals. The contrast may be summed up by saying, that France fights for ideas, England for interests.

But admitting that, as an abstract, ethical question, there may be much to be said in favor of the French, as contrasted with the Teutonic character, as a question of practical politics we must take things as we find them, and recognize that these traits of French character, which have been such a fruitful cause of wars in the past, remain so in the present and the future. In the case of other nations, we can, to a great extent, foresee and predict their course, if we understand rightly what are their interests, and their great currents of national aspirations and feelings. They are the planets of the European system revolving in more or less settled orbits by calculable forces ; while France is a comet whose course may be retrograde, and which may blaze out suddenly at some unexpected moment. Who can tell whether, five years hence, France will be an Empire, a Monarchy, or a Republic, or whether she will be at peace or war with Germany, Italy, or England? This is a danger for all other States, but especially for England, for it must never be forgotten that

France is the only enemy from whom we have anything serious to apprehend. Russia would in all probability let us alone in India if we let her alone in Europe; and if the worst came to the worst, a war with Russia would be, as Bismarck said, one between a whale and an elephant. Russia could not contest with us the empire of the seas, or threaten our coasts with invasion. All she could do would be to excite alarms on our Indian frontier, and put us to the expense of maintaining in India one or perhaps two army corps more than would otherwise be necessary.

But with France it would be a duel *à la mort*. In conceivable contingencies, under the unknown conditions of modern naval warfare, she might either command the Mediterranean and expel us from Egypt, or the Channel, at any rate for a time, and invade us with a superior force and capture London. In any case, she could inflict great injury on our maritime commerce, and transfer a large portion of it to neutral flags. She would certainly aim at one or all of these objects, and if possible at an invasion, setting off a victory on British soil, and the capitulation of London, as an offset against Waterloo and the occupations of Paris. In such a war we could not safely reckon on allies. In the absence of positive engagements, Germany would have no great interest in risking the bones of a Pomeranian Grenadier to defend England. On the contrary, a war between France and England would divert the attention of France from the recovery of her lost provinces. If adverse to France, the result would be to cripple her for a long period; if successful to her, it would lead to a scramble for naval and colonial supremacy, in which Germany might find her account, and in any event would throw England into the hostile camp, and ensure her seeking a German alliance on almost any terms that Bismarck might choose to dictate. The accession of England at once to the triple alliance would be a great security against these dangers, but it is a question of terms. Bismarck would undoubtedly act on his maxim, "*Do ut des*," and require positive engagements in exchange for those he gave. Lord Salisbury alone is in a position to know what those terms would be, but it is to be apprehended that they would be of such a nature that the British Parliament and public opinion would decline to ratify them. We should certainly be very reluctant to take engagements which obliged us to enter on a second Crimean war to bolster up Turkey, or to risk being drawn into a great war by the conflict of Austrian and Russian influences in the Balkan States. Moreover, while these dangers from France and Russia remain in the background, it is highly important for us to maintain friendly relations with those States as long as possible.

Our wisest course probably will be to avoid entangling alliances, and trust to our own strength; but in this case it is indispensable to put our naval and military defences—and especially our navy—on such a footing as to remove any temptation to make a sudden attack on us, in the hope that it might find us unprepared. But in the mean time, it remains a

primary factor in the European situation, that no general disarmament is possible, unless France sets the example.

This could only be accomplished in one of two ways—either by a great war, in which France was so utterly defeated as to be completely crippled, or by her being so isolated as to see that any attempt was hopeless, and so exhausted by increasing debt and taxation as to make some of the parties who, in the frequent vicissitudes of French politics, may come into power, see that peace was a safer card to stake upon than *la revanche* and military glory.

But this is hardly likely to come about as long as hopes remain of an alliance with Russia to redress the balance of force, and enable French armies to take the field with some reasonable chance of success. This, again, depends very much on the relations between Austria and Russia.

If the natural desire of France to regain her prestige and her lost provinces is one principal element in the European situation, the unstable equilibrium of the Austrian Empire is another. It has been said that "if Austria did not exist, it would be necessary to invent her." This is to a great extent true. Nothing but the tradition of loyalty to the Hapsburg dynasty, and the *esprit de corps* of a powerful army, keep together the heterogeneous elements of which Austria is composed. Half the population are of Slavonic and other alien races, who dislike the German and still more the Magyar elements, which are the dominant races in the dual empire. In the Cis-Leithian, or western half, where the Germans preponderate, it is a question of the nicest statesmanship to reconcile this German preponderance with the rival pretensions of the Czecks of Bohemia and Poles of Galicia. Concessions to these make the Germans look towards Berlin, and concessions to the Germans make those look towards St. Petersburg. Still the situation is possible, for the colossal power of the German Empire stands behind, and makes it certain that a Slavonic Bohemia would not be tolerated in the heart of Germany. But in the eastern, or Hungarian, half of the empire, the situation is greatly aggravated. The Magyars are the ruling race, who, by their superior statesmanship, valor, and tenacity, have fairly won the foremost place; but they have one fatal defect—they are not sufficiently numerous. They are outnumbered by the Slavonic and Rouman races, alien to them by language, past history, and religion; and who, with the spread of education, and the rising feeling of nationality, resent more and more every day the attempts of the Magyars to consider them as mere appanages of the kingdom of St. Stephen. The great Croatian bishop, Strossmayer, is, as we have seen lately, a political force, who can treat almost on equal terms with popes and emperors. And well he may, for he represents the old Slavonic nation, who form a majority, and in many cases nearly the whole of the population in Croatia, Dalmatia, Carinthia, Southern Hungary, Bosnia, Herzegovina, Montenegro, Servia, and the western half of Macedonia. They are all of the same race, speak the same language,

read—or are learning to read—the same books and newspapers, and are drawn together by so many affinities, that if all external pressure were withdrawn, they would almost certainly rush together, and reform the great Servian kingdom which was shattered by the Turks at the battle of Kossova. And they are all animated by very much the same feeling, not to be Germanized, and above all not to be Magyarized. This is Austria's great difficulty, and, in case of a war, might readily become Russia's opportunity. While this state of things lasts Austria cannot disarm, and an armed Austria implies of necessity an armed Russia.

Is there any possible escape from this fatal circle, which compels all the great Powers not only to maintain, but to increase and improve those gigantic armies which have converted Europe into an armed camp, and passed 15,000,000 of men through the hands of the drill-sergeant? I can see only one possible alternative to that of a great war, which should definitely determine who was the strongest, and to a great extent remodel the map of Europe and the conditions of its equilibrium. It is this. If the "honest broker" at Berlin could negotiate such a compromise as should satisfy Russia without unduly weakening Austria, and by satisfying Russia should isolate France, and thus render a general disarmament possible. Such a compromise would have to be based on a partition of European Turkey.

A century ago the rivalries of Russia, Austria, and Prussia were settled by the partition of Poland. That was felt to be a political crime, for it extinguished the life of an historical nation, which however turbulent and troublesome, had done signal service to Christendom under Sobieski at the siege of Vienna. But no such moral considerations would apply to the Turks, who have never been anything but a tribe of invading warriors, encamped on the soil of Europe, desolating its fairest provinces, and crushing out the civilization and progress of the conquered races. One has only to compare the present state of Roumania, Bulgaria, Servia, and Greece with what it was while they were governed by Turkish Pachas, to see what an immense boon to civilization it would be if Christian were established for Mahometan rule in the remaining provinces. And it would be the first step towards the establishment of a state of stable equilibrium in the east of Europe, for while the "sick man" is dying by inches, all sorts of interests are watching for his inheritance, each anxious either to secure the lion's share for themselves or to prevent others from appropriating it.

At the same time there are great practical difficulties in the way of a peaceable solution, to appreciate which it is necessary to understand the position of the principal parties interested. These are in the first place Russia, Austria, the new Balkan States, and Greece; and in a lesser degree Germany, England, and Italy. The interest of Germany is almost entirely Austrian. She cannot stand by and see a semi-German empire like that of Austria dismembered, and the formidable power of Russia,

backed by Pan-Slavonic aspirations, preponderant over Eastern Europe almost up to the gates of Vienna. And although Constantinople is the back-door of Russia, it is also, to a considerable extent, the back-door of Austria and Southern Germany. The interest of England and Italy is almost exclusively confined to the question of Constantinople and the Dardanelles. It would be dangerous for us and Italy in the Mediterranean, if the Black Sea and Dardanelles were to become a sort of Russian *mare clausum*, inaccessible without her permission to commerce, and from which Russian fleets or privateers could issue as from an impregnable fortress, where they could not be attacked in return.

As regards the minor states—Roumania, Servia, Bulgaria, Greece, and Montenegro—though weak individually, they have all attained to a separate and growing nationality, and together cover too wide an extent of population and territory to be ignored. It is evidently a question of influence and protectorate rather than of annexation in the case both of these countries and of the remaining provinces of Turkey, which in the natural course of events must sooner or later fall to them. Thus Old Servia must gravitate towards Servia, Eastern Macedonia towards Bulgaria, the Macedonian sea-coast, Epirus, Crete, and the islands towards Greece, constituting in each case states large enough to be jealous of their independence, and averse to being annexed as provinces either of Russia or of Austria. But in the long run their leanings must be rather towards Russia than Austria, both from affinities of race and religion, and because the support of Russia is indispensable for them in order to obtain the natural extension of their frontiers and the liberation of their brethren who still remain under the chronic misgovernment of Turkey.

The solution of this problem must lie in the direction of a federation of these Eastern Christian States, and such a neutralization as prevents them from attacking one another, and from being used either as an outpost of Russia to attack Austria, or as an outpost of Austria against Russia to protract the agony of the Turkish Empire, and bar the way against any advance of Russia towards Constantinople. Under such conditions these new states might one and all disarm, and devote their energies to peaceful pursuits, instead of exhausting themselves by keeping up large armies and foreign military princes.

But after all Constantinople remains the chief difficulty. Unless some arrangement can be made respecting it, it must remain a constant source of antagonism between Russia and Austria, and a permanent element of unstable equilibrium in European politics. The prize is too valuable to be appropriated unconditionally by any one of the parties interested, except as the result of a great war which ended in the complete victory of one of the claimants.

To understand this fully we must endeavor to place ourselves impartially in the point of view of the principal parties. For Russia the question of Constantinople is absolutely vital. It is so both from material

considerations, holding as it does the key of the back-door of her house, and in hostile hands barring the commerce of the southern half of her empire from its natural outlet, and enabling the enemy's fleets to enter the Black Sea while Russian ships of war are blockaded in it. And it is even more vital from the national and religious feelings of the entire Russian nation. Russia is the one remaining country in which religion still constitutes an important element in politics. The very phrase "Holy Russia" denotes the feeling of the immense majority of the 100,000,000 of its population. Devotion to the Christianity of the Greek Church, and to the Czar as its temporal representative, is the animating principle which makes the Moujik die in the trenches of Sebastopol, or storm the Balkan passes in the depths of winter. Add to this an hereditary hatred of Turks, bred by centuries of contests with them and Tartars.

To these simple, devoted Russians a war with Turkey for the emancipation of Christian races and places, is almost what a war with the infidel for Jerusalem was to the early Crusaders. And Constantinople is their Jerusalem, the cradle of their religion, the head-quarters of the orthodox faith, the afflicted elder sister of their own Moscow. To place the Cross above the Crescent on the dome of St. Sophia would be the dearest wish of every Russian, and the Czar who succeeded in realizing it would be for generations the object of almost divine veneration. The strength of this feeling was shown only the other day, when sympathy with Servians fighting against Turks attracted Russian volunteers of all classes, and finally developed into such an irresistible current of public opinion as swept away the Czar and his statesmen, and involved Russia in the last great war with Turkey.

The fact is that Russian politicians may avail themselves of this feeling for purposes of ambition, or restrain it for a time if the occasion does not seem opportune, but they cannot control it. Whether we like it or not, we must start with the fact that Russia will spend her last rouble and fight her last man rather than allow any other Power to seize Constantinople, or permanently bar the way towards it. Also, that although she may be content to remain passive and wait for a favorable opportunity, and for the approaching dissolution of the Turkish Empire, to strike a blow, she will not disarm, or allow any combination which might permanently debar her from her share of the inheritance, while the Eastern question remains in its present provisional state of unstable equilibrium.

This implies, that as long as the Eastern question remains unsettled, Russia cannot allow France to be crushed, and thus leave herself without an ally, in presence of Austria backed by Germany. And Russia can afford to wait, for the course of events is tending steadily in her favor. Catholic Austria, with her conflicting nationalities, cannot in the long run compete for the protectorate or annexation of Eastern Christians of the Slav race and Greek Church with orthodox Russia, with her population of 100,000,000 of the same race and religion. Even a successful war

would only add to the embarrassments of Austria by introducing a still larger Slavonic element into her empire, and making an equilibrium based on the preponderance of the Magyars still more difficult; while Russia, on the other hand, could keep whatever she got in the way of influence or territory without endangering the unity of her empire.

The result, therefore, is that in the present state of European politics disarmament is almost impossible, and the condition of precarious armed peace and ever-increasing armaments must go on, until some accident fires the match and it explodes in a great war. The only possible escape would be, as already suggested, by a settlement of the Eastern question at the expense of Turkey, in some way which would satisfy Russia without unduly crippling Austria. A federation of the Greek Christian States seems possible, as the first step towards a solution. Is any such solution possible as regards Constantinople? If nothing is done the course of events will probably, sooner or later, and after one or more wars, solve the problem by giving it to Russia.

A pacific settlement of the question of Constantinople would only be possible on the basis of making it, with the Dardanelles, a sort of neutralized and unharmed free city, open at all times to the commerce of the world, but precluded from taking any part in war, or allowing itself to be made a basis for hostile operations. This could be done either by neutralizing the whole of the Black Sea, or by allowing ships of war of all Powers to pass in or out, but not to remain within its limits, or to engage in hostilities within a limited distance of its ingress or egress; making the Dardanelles, in effect, a sort of Suez Canal.

Constantinople itself would have to be made a sort of Metropolitan city of the Greek Church, and its civil government vested in some council in which the interests of the guaranteeing Powers were fairly represented. The hereditary prince or president of such a council would have to be some one acceptable to Russia and professing the Greek religion.

Whether such a solution would be possible it is difficult to say, but the alternative seems to be a continuance of the present precarious state of things, involving constant alarms and the maintenance of excessive armaments, with the probable ultimate result of a still more complete protectorate or annexation by Russia. In fact the difficulties of any peaceful solution are so great that it seems probable that Europe cannot arrive at a state of stable equilibrium, making a general disarmament possible, without passing through the crisis of a great war, to ascertain by the rude test of the survival of the strongest, which conflicting interest has got might on its side, and which being the weaker must go to the wall. Some accident may precipitate such a crisis any day but it would be rash to prophesy without knowing, and the outcome of the present state of tension must be regulated to the "Problems of the Future."

CHAPTER XIII.

TAXATION AND FINANCE.

HAVING been practically conversant with financial subjects for the best part of half a century, I am naturally disposed to look at the questions of the day a good deal from the point of view of financial policy. It is clear to me that we are approaching a grave crisis as regards this policy. The necessity of placing the defences of the country in a state in which we can contemplate the enormous armaments of foreign nations and the menacing contingencies of European wars with tolerable security, has become so apparent, that a very large expenditure is inevitable in order to bring up the army and navy to a standard below which they never should have been allowed to fall. This of itself necessitates a departure from the principles on which Chancellors of the Exchequer have been accustomed to frame Budgets, viz., to pare down estimates, pay off National Debt, and, if possible, reduce taxation: in a word, to make immediate popularity with the House of Commons and the country the primary condition in the art of Budget-making.

It is evident that this is incompatible with the necessity of making large and immediate expenditure on our armaments, and this of itself makes a new departure in finance inevitable.

To make a new departure we must also take into account the growing power of a vastly enlarged public opinion and electorate, which insists on applying rules of common-sense and natural equity to all institutions and all subjects of national policy, and will no longer be contented with authority and tradition. Finance, being a subject which comes home to every one in the unpleasant form of taxation, cannot escape from this influence; and if the country is called upon to incur larger expenditure, it will insist on two things: first, that it gets money's worth for its money; and secondly, that the requisite taxation is levied fairly as between different classes.

Having thought much on these subjects, I have attempted, in the following article, to define some of the principle points which will have to be considered, and to indicate the lines upon which Budgets, suited to the altered circumstances of the times, will have to be framed. My conclusions may be right or wrong, but at any rate they are not those of a

mere amateur, but of one who has in his time prepared two Indian, and assisted in preparing two English Budgets.

It has been said, "Give me a good foreign policy and I will give you good finance." There is much truth in this saying, for our foreign policy is responsible for a large portion of the national expenditure. Without going back to the great wars of the last century, or the struggle against the French Republic and Napoleon, respecting which opinions may differ, and confining ourselves to recent history, we may affirm with confidence that the Crimean, the Abyssinian, and the Afghan wars were diplomatic wars, and that our expenditure in Egypt, the Soudan, and South Africa is to a great extent attributable to a vacillating and unwise foreign and colonial policy. The surest test of the wisdom or unwisdom of a policy is to ask ourselves whether, if we had to do the thing over again, we should do it as it was done, or differently. Assuredly, in the cases above mentioned, we should not do it as it was done; and it is within the mark to say that at least £100,000,000 has been spent without necessity, without result, and with a loss rather than a gain of reputation.

At the same time there is a reverse to the medal, and it may be asserted with equal truth that bad finance often makes bad foreign policy. When I say bad finance I mean bad in the sense of neglecting the cardinal maxim that true economy is based on efficiency, and that a "penny-wise and pound-foolish" policy succeeds no better with a State than with an individual. Extravagance, rather than economy, is the certain result of living in a condition oscillating between periodical panic and periodical parsimony.

If we inquire what has been the cause of this state of things, the answer must be that we have felt ourselves to be unprepared, and being unprepared we have been nervous and afraid. Afraid of what? Practically there are only two Powers from whom any serious danger can be apprehended, Russia and France. The danger from Russia is remote, for she could neither invade our shores nor contest our naval supremacy. It resolves itself into the single apprehension that she might attack our Indian Empire. Now as to this, it is by no means certain that Russia would menace India if England abandoned the policy of bolstering up Turkey and thwarting Russia at every point in Eastern Europe. The Turkish rule in Europe is surely and speedily decaying, and the disposal of the inheritance is very much more the affair of Austria and Germany than of England. Any extension of the Russian Empire in this direction would tend to diminish rather than increase the chances of her undertaking a great war of aggression against India. But suppose the Russophobists are right, and that Russia really does entertain such a project, what is required to make our Indian frontier, humanly speaking, absolutely secure? Simply that we should be able to send there at a short notice 30,000 or 40,000 additional English troops fully equipped and ready for immediate service. With such a reinforcement added to the English and

native armies already there, and the command of the frontier passes, no one but an amateur strategist planning campaigns on small-scale maps, can suppose that Russia would undertake such a tremendous enterprise as that of sending an army hundreds of miles from its base, across the rugged mountains and warlike tribes of Afghanistan, to attack us.

But the possibility of sending such a force in case of need to India is a question of English finance, for we cannot throw the cost exclusively on India without provoking widespread discontent, both by the sense of injustice and by the pressure of additional taxation.

The Indian question is, however, only one branch of the much larger question of the naval and military defence of the Empire. To feel secure, we ought to be in a position where we can command the seas and repel invasion from any probable enemy? If it is asked, From what possible or probable enemy? the reply must be—from France. France alone is in a position to menace our shores with invasion, or to contest our naval supremacy. It may be said that the interests of the two countries in preserving peace are so identical, and the consequences of war to both would be so disastrous, that a rupture between them is a remote contingency. So it is, no doubt, as far as England is concerned, but unfortunately the history of France leads to a different conclusion. The wars of Louis XIV. and of Napoleon were wars opposed to the true interests of France, and ended in disaster; but yet, in quite recent times, we have seen France engaged in four wars—the Crimean, the Italian, the Mexican and the German, of each one of which it may be distinctly said that it was a dynastic war, undertaken for no substantial object affecting the well-being or safety of the French nation, but, on the contrary, involving a certain heavy sacrifice of treasure and blood for no sufficient reason, and with the net result of lowering the place of France in the scale of nations. They were wars undertaken in defiance of common-sense, for the sole purpose of consolidating the throne of a political adventurer.

What has happened once may happen again. Administration is so centralized in France that whoever gets hold of the War and Foreign Offices in Paris can plunge the nation into war almost without its knowing it and against its wish. The temptation to do so for a weak Government is always great, for although the majority of sober and sensible men and of rural electors might be opposed to war, there is always a turbulent and restless minority in Paris, the large towns, and the Press, whose influence is more immediately felt, with whom any measure appealing to the national Chauvinism and promising *la gloire* would for the moment be popular. The strong feeling of patriotism also, which is one of the honorable traits of the French character, would, for a time, induce all parties to lay aside their differences and support the Government of the day when once engaged in war.

There is always a danger, therefore, that under any form of government the man or men at the head of affairs might, if driven to extremities,

follow the example of Louis Napoleon, and seek an escape from domestic difficulties by involving the country in war. Nor is there any security that if Germany and her allies seemed too strong to be attacked, England might not be selected as affording a less dangerous antagonist. The interests of France and England are in contact at so many points—in Egypt, Madagascar, Newfoundland, and the Pacific—that collisions frequently arise which are smoothed over with difficulty, as in the case of the New Hebrides, even when both Governments are sincerely desirous of peace, and which would easily furnish pretexts for war if either Government desired it.

The cardinal point, therefore, of English policy ought to be, while doing all that is possible to maintain friendly relations with France, to keep in view the possibility of a renewal of the old historical wars between England and its restless and rival neighbor. To avert such a calamity the same measures are needed as to protect ourselves from serious dangers in case we are attacked. Our naval supremacy should be so assured that there is no temptation to attack us, and our home defences such, that the risk of invasion, in case some of the untried contingencies of modern warfare gave the enemy a temporary command of the Channel, is reduced to a minimum.

As regards the home defences the question resolves itself into a better organization of the reserve forces, fortifying our principal ports and arsenals, and an increase of the regular army. Above all, we want such an organization as would insure us against surprise, and enable every man and gun which appear on paper to find their place at once, and take the field in a state of efficiency in case of any sudden emergency. As regards the regular army, the best military authorities seem to agree that the two army corps, of which we have often heard, in a state of immediate readiness, either for home or foreign service, with proper transport, artillery, and other appliances, are about what would be sufficient to give reasonable security. Of these one is a question not of additional expense, but of Irish policy. Without discussing the merits or demerits of this policy, it is an obvious fact that as long as we maintain a policy hostile to a great majority of the Irish race at home and abroad, we must support it by a force of not less than 30,000 soldiers and 15,000 military police, who, in case of war or apprehension of war, could not be withdrawn, and are for all practical purposes non-existent for the defence of the Empire.

In addition to the two army corps there is no doubt that we require more artillery and better organization for the Reserve, Militia, and Volunteer forces, and stronger fortifications to protect our more important arsenals and seaport towns against sudden attacks. All this costs money, but after all the main question is to insure our naval supremacy. It is evident that this is not the case at present. We may be a little stronger than France if the whole naval force of the two countries could be arrayed against each other in a single engagement; but it is a question

whether we could command, at the same time, both the Channel and the Mediterranean. Probably the command of the latter would depend on the side which Italy took in the war, and our safety ought not to depend on foreign alliances, which we shall be likely to gain if we are strong and lose if we are weak. But in any case it is pretty clear that with our present force we could not hope to maintain a permanently efficient blockade of four or five ports at once, and prevent portions of the French fleet and cruisers and privateers from escaping and inflicting immense damage on our commerce, and possibly on our coast towns and colonies. It is the most reckless extravagance to be remitting taxes and paying off National Debt while this state of things continues.

Who is responsible for it? The answer may seem to be paradoxical, but it is nevertheless true: the fault lies mainly with the Treasury.

The Chancellor of the Exchequer is always a powerful, and often the most powerful, member of the Cabinet, and his interests and prepossessions all lie in the direction of cutting down estimates and bringing in popular Budgets. He is surrounded by officials whose business it is to criticise all expenditure that admits of being cut down or postponed. It is a useful and necessary function of Government, and ably discharged by men of great intelligence and experience at the Treasury whose lives have been devoted to it. It requires a strong man as Chancellor of the Exchequer to emancipate himself from this influence and take a large and statesmenlike view of necessary expenditure. And it takes a still stronger man to escape the temptation to earn for himself the character of a sound financier, and for his Government and party a certain immediate popularity, and to brave the attacks sure to be made upon him by ultra-economists and political opponents, for the sake of the ultimate and probably remote results of a really national statesmanship. It is not a question of party: the same influences effect Conservative as Liberal Governments; and it has been reserved for the party which is nothing if not Imperialist, to furnish some of the most recent and extreme instances of this sacrifice of efficiency to economy, as in the reduction of the Horse Artillery.

There is a mischievous superstition at the Treasury, that the test of a sound financier is to pay off the National Debt. This question of a National Debt affords a good illustration of the axiom for which I often contend, that complicated social problems do not admit of hard-and-fast solutions. Even the primary proposition that a National Debt is an evil, obvious as it seems, is by no means necessarily true. The few remaining countries of the world which have no debts, such as Persia and Morocco, are scarcely countries with which we should wish to exchange conditions. The example of the United States shows that a surplus may be almost a greater embarrassment than a deficit, and more calculated to produce alterations of artificial stringency and plethora in the money market. The fact is that a National Debt has become almost one of the necessities of a progressive and civilized country. As in the case of a railway com-

pany, if traffic expands, money must be spent on increased plant and appliances, and if the capital account is rigidly closed, this can only come out of revenue, and increasing prosperity may mean diminishing dividends. The question is, what is the amount of debt compared with the resources of the nation; and how the money is spent, whether unprofitably in useless wars, or wisely in prudent precautions against inevitable risks, and on objects such as education and sanitation, which promote the welfare and ultimately the wealth of the community. For it must be always remembered that the amount of a National Debt is a relative quantity, depending not on absolute figures, but on the ratio which the annual charge bears to the annual income of the country. Thus a debt of £700,000,000 at 3 per cent., of which the capital cannot be called in, is practically a smaller debt than one of £400,000,000 at 6 per cent. The rate of interest payable on a debt is, however, a very important factor in deciding whether it is or is not wise to increase taxation for the purpose of paying it off. Thus in the case of the United States, which affords the principal instance of large repayment of debt by excessive taxation, the repayment has not been effected without great sacrifices. From being the cheapest the United States have become one of the dearest countries in the world, the mercantile marine has been almost annihilated, and protected industries have grown up which threaten serious difficulties. Experience shows, that Protection may succeed as well as Free Trade in its earlier stages, while the demand of the home market is more than sufficient to meet the production. But the time comes when the home market is glutted, and manufacturers must look to foreign markets for the sale of part of their commodities. In such markets they cannot compete with the cheaper products of Free Trade countries, and the United States have already approached this stage.

Notwithstanding these drawbacks the policy pursued by the United States was probably a wise one, for this decisive consideration predominated, that at the end of the war their enormous debt carried interest at 6 per cent., while now they can borrow any amount at 3 per cent. Every £1 therefore redeemed by taxation practically paid off £2 of debt.

In the case of England this consideration does not apply. The rate of interest now paid, especially since the recent Conversion, is so low that there is little to hope from further reductions, and the question of repaying debt may be treated on its own merits, and as one of raising £1 by taxes to pay off £1 of debt. There are two ways of reducing debt—one by actual repayment, the other by out-growing it. Thus, if we take Mr. Giffen's estimate that the national income, which in 1843 was £515,000,000 a year, is now £1,200,000,000, while the annual charge for the National Debt has remained stationary, or rather diminished, we have practically paid off more than half our debt. The total charge may be taken at about £25,000,000 a year for interest, and £5,000,000 for sinking funds in the form of terminable annuities or otherwise. That

is to say, taking the nominal capital of the debt at £750,000,000, we were in 1843 in the position of a man who with an income of £500 a year owes £750, or a year and a half's income ; and are now in the position of one who, with £1200 a year owes the same £750, or less than three-quarters of a year's income. If the same comparison were carried back to the close of the war in 1815, it would show that the burden of the National Debt is practically four or five times less now than it was then.

In making this comparison it must be remembered also that even if the ratio of debt to income remains the same, a large debt with a correspondingly large income is a much lighter burden than in the converse case of a small debt and small resources. Thus, to take an illustration from private life, a debt of £200 is a very serious affair for a clerk living, perhaps with a wife and family to support, on a salary of £200 a year ; while a debt of £20,000 is a mere trifle to a man of £20,000 a year. The latter can pay it off with ease out of revenue, and renew it or repay it by a fresh loan, without the slightest difficulty and at a very moderate rate of interest ; while to the former it may mean ruin, or a bill of sale of his effects and usurious interest.

It is clearly, therefore, better for a country to remain with a fixed debt and outgrow it, than to attempt to pay it off by taxes which fetter trade and retard the development of industry and wealth. This was substantially the policy of the great Sir Robert Peel when he imposed the Income-tax, not for the purpose of paying off debt, but to repeal oppressive taxes and inaugurate the system of Free Trade under which the Empire has made such marvellous strides in prosperity that, as Mr. Giffen shows, its aggregate annual income has increased in forty-five years from £515,000,000 to £1,200,000,000 a year. No one can say that the country would have been as well off if Sir Robert Peel had adopted the opposite policy, which a good many amateur financiers and half-formed journalists now call sound finance, and applied the proceeds of his Income-tax as a sinking fund. Even Mr. Gladstone, rigid economist as he is, has practically adopted the same policy as Sir Robert Peel, and his splendid financial reforms have been carried out by applying surpluses to reduce and simplify taxation, instead of appropriating them to large repayments of debt.

In fact, it is sufficient for a Chancellor of the Exchequer to aim at avoiding any permanent increase of debt in times of peace. To insure this, as experience shows that with our extended empire, and the growing wants of an increasing population, the necessity of occasional drafts on capital account cannot be avoided, it is wise to frame estimates on the safe side, and make a moderate provision in the way of sinking funds, so as to have surpluses in ordinary years to apply in counteracting this tendency towards increase. But this is a very different thing from opposing an inflexible *non possumus* to all demands for increased expenditure on capital account, however indispensable they may be for national safety and welfare.

If, for instance, it should be clearly established that an outlay of, say, £50,000,000 in addition to the ordinary estimates is absolutely necessary in order to bring our army and navy up to the standard necessary to give us reasonable security, there should be no hesitation in raising it by a loan. The charge for it would not exceed £1,500,000 a year, or less than one penny in the pound of Income-tax, and the existing sinking funds are ample to secure us against its being a permanent addition to the debt. Surely this is better than remaining with our eyes open, only half insured, risking being involved in great wars menacing our very existence, and in all probability having to do expensively in a panic what might have been done efficiently and economically by prudent and timely preparation.

In view of the necessity for larger expenditure to provide for the security of the Empire, it is important to consider whether the system of taxation by which the revenue is raised is such as commends itself to the intelligence and good sense of the community, and taxes the different classes fairly in proportion to their several interests. The main argument of demagogues is to represent the army and navy as institutions by which poor men are taxed to provide outdoor relief for scions of the aristocracy. This is a gross exaggeration, and on the whole there is no civilized country in which taxation is less unfair and less oppressive than in our own. A country in which the total effective taxation for Imperial purposes does not exceed 5 or 6 per cent. of the national income, and in which the money wages of labor have doubled and their spending power increased in the last forty years, cannot justly be described as groaning under excessive taxation. Still there is a certain substratum of truth in the assertion that the enormous unearned wealth of the country does not pay as much as it ought towards the defence of the Empire and the maintenance of law and order, on which its very existence depends. In order to form any just opinion on this subject it is indispensable to keep clearly in view the fundamental distinction, which has been too much overlooked, between earned and unearned income. The former is a creation of natural, the latter of artificial law. The former commands a market all over the world wherever muscles and brains are in request. The latter depends to a great extent on rights and privileges, secured by laws which differ in different ages and countries, and are in this country exceptionally favorable to the extreme rights of property.

The real difficulty in carrying out such a loan as has been suggested is not so much in the amount required, as in the impression which prevails that there is no security for the money being properly spent, and the feeling that our system of taxation is inequitably assessed. As regards the first point, it is unfortunately only too true that under our present system of administration we cannot depend on getting money's worth for our money. How can it be otherwise when we consider what that system has been and to a great extent still is? A long experience of

administration, both in the affairs of the State and of private companies, has taught me this lesson—the great secret both of efficiency and economy is to have a clear chain of responsibility, so that, if anything goes wrong you can at once put your finger on the man who is accountable for it. Having this, and a clear system of accounts, so as to be able to see at a glance what the results really are, give your officials a free hand and let them feel that they are sure of your support as long as the results come out right. And above all avoid frequent changes, and let there be a reasonable degree of permanence in your policy, so that the heads of departments may know what work they have to do, and how much they will have to spend, with some tolerable assurance of certainty.

Our existing system violates all these rules. Governments change on the average every three or four years, and with every change of Ministry new men come into power at the Admiralty and War Office, who are selected by Parliamentary considerations, and are as a rule totally inexperienced in the work of the departments over which they preside. With new men at the head and changes in many of the principal officials, new views and a new policy are introduced, and a programme is hardly laid down before it is either expanded to meet some momentary panic, or more probably cut down to enable the new Chancellor of the Exchequer to introduce a Budget contrasting favorably with that of his predecessor. The object seems to be not to define responsibility, but to conceal it. The Admiralty, for instance, seems to be constituted with curious ingenuity for making it impossible to fix responsibility on any definite individual. Does a new ironclad refuse to answer her helm or rolls so that she cannot fire her guns in a seaway, who is to blame? Is it the naval constructor?—but perhaps he was overruled by the Sea Lords, or the First Sea Lord by the Board, or the Board by the First Lord, or the First Lord by the Treasury. Very probably the design was sanctioned and the construction begun in Lord Northbrook's time, and the ship was finished and her defects discovered under Lord George Hamilton. And what reasonable man could hold either one First Lord or the other responsible for not being a heaven-born naval architect, and for adopting plans laid before them by presumably competent officials?

So, again, if guns burst, or ships and forts lie idle for want of guns, whose fault is it? Scarcely that of the Admiralty, who do not even manufacture or buy their own guns, but most probably that of the Chancellor of the Exchequer and Cabinet, who refuse to sanction the necessary expenditure. Or, again, in the case of dock yards, who knows exactly what the work costs, and how that cost compares with that of other countries and of private establishments; and who is responsible for detecting and preventing waste and extravagance?

I often think what the result would be if the railway companies managed their affairs on the same principles as the nation applies to its naval and military expenditure. Suppose the Brighton Board were turned

out every three years, and a new Board came in with new views, a new policy, and new men at the head of the locomotive, traffic, and other great spending departments, how long would it be before expenses went up and dividends down?

One great advantage of the system which I advocate would be that such a loan would almost of necessity introduce a better system of administration. It would not be sanctioned without a definite and well-considered programme of the purposes to which it was to be applied. So many ironclads; so many cruisers and torpedo-vessels, of such tonnage and speed, and at such estimated cost per annum, until the required number was completed; and so forth for forts, batteries, and other requisites for an efficient army. And this definite expenditure would have to be carried out by individuals, or by small special commissions, which would be selected for their fitness and practical experience in their respective departments, whose tenure of office was independent of Parliamentary changes, and who knew beforehand for five or six years what work they were expected to do and what money they would have to do it with. Of course the general supervision and control would remain of the Cabinet Ministers at the head of the departments, and the ultimate control of Parliament would not be affected. But there would be a practical assurance that so long as the programme was being properly carried out it would not be interfered with; and with a clear system of accounts showing the results year by year, the control of Parliament would really be greater than when matters are so muddled up that it is almost impossible to say what the actual results are, and, if they are unsatisfactory, who is responsible.

The next question is, whether the burden of taxation is equitably assessed on the different classes and interests.

Taking Mr. Giffen's estimate of the national income and its sources, in 1884 the total was £1,200,000,000 a year, of which £400,000,000 was unearned income from capital, and £800,000,000 working income, £180,000,000 of the latter being derived from professional and trading incomes above £150 a year included in the Income-tax, and £620,000,000 from working incomes of lower amount, principally consisting of wages. Measured by income, therefore, the unearned is one-third, and the earned two-thirds of the total amount. But it must be remembered that the unearned third is derived from realized property, and is worth on the average perhaps twenty year's purchase, while the unearned two-thirds is precarious, depending on life, health, employment, and a hundred other contingencies. Without attempting any detailed estimate, it is evident that the value of the unearned property, which requires a higher insurance against risks, far exceeds that of the property which is earned by work, and that it ought to pay its fairly corresponding share of the premium which is required to cover those risks adequately.

Let us see now how the national revenue to provide for national

expenditure is actually raised. Taking the average expenditure of the last three or four years in round figures, it is about £90,000,000 a year, of which

£30,000,000 is for National Debt interest and sinking fund,
30,000,000 for naval and military defence,
20,000,000 for civil administration,
10,000,000 for expenses of collection of revenue.
<hr/> £90,000,000

This is met by

Post Office, telegraphs, &c., which are mainly payments for services rendered	£10,000,000
Crown lands and interest on advances, &c., which are not taxes	1,500,000
Miscellaneous, which are mainly matters of account, and fees for services rendered	3,500,000
Revenue which is not taxation	<hr/> £15,000,000

Leaving in round figures £75,000,000, which is raised by taxes as follows, viz.—

Customs	£21,000,000
Excise	27,000,000
Stamps and taxes, including probate and succession duties	15,000,000
Income-tax	12,000,000
	<hr/> £75,000,000

Continuing the analysis more closely we find—

TAXES MAINLY PAID BY THE NON-PROPERTIED CLASSES.

Alcohol—Home spirits	£14,000,000
Foreign spirits	4,500,000
Beer	8,500,000
Licences	3,500,000
	<hr/> £30,500,000
Tobacco	9,000,000
Tea and coffee	5,000,000
Total	<hr/> £44,500,000

TAXES PAID EXCLUSIVELY OR PRINCIPALLY BY THE PROPERTIED CLASSES.

Income-tax £12,000,000 (but of this nearly one-half according to Giffen's estimate, is paid by trading, professional, and other working incomes).

Probate and succession duties	£8,000,000
Deeds	2,000,000
Assessed taxes	3,000,000
Wines	2,000,000
	<hr/> £27,000,000

Leaving about £3,500,000, which is raised mainly by taxes affecting trade, such as bills of exchange, receipt stamps, railways, marine insurances, &c.

As far as can be ascertained by the aid of Mr. Giffen's figures, the amount paid specially by unearned income does not exceed £15,000,000 to £20,000,000 a year out of a total Imperial taxation of £75,000,000.

The mere statement of the figures is sufficient to show that this is not a sufficient proportion. Without proposing any Radical or Socialistic change in our fiscal system, it is evident that such a tax as that on tea ought not to be maintained to enable unearned income to escape from paying a larger share of taxation. The tea duty combines almost every conceivable disadvantage. It discourages temperance, restricts the development of an important industry in our colonies, and presses with special severity on the unrepresented and weaker female half of the population, whose interests we are bound to consider. The first step towards a really national Budget of the future ought to be to repeal this tax, and make up the deficiency by equalizing and increasing the duties on all property alike, real or personal, which passes by gift or succession, and is therefore clearly unearned. The additional cost of providing for an efficient navy and army, including the interest and sinking fund of any loan raised for the purpose, ought also to fall mainly on this class, though a portion of it might properly be provided by a temporary reduction of the large amount of sinking fund applied to the redemption of debt.

As regards the manner in which taxation should reach this class of unearned incomes there are two ways possible: one to reform the Income-tax on the broad, simple principle of observing a distinction between earned and unearned income, and making the latter pay at a higher rate; the other, that of making a large addition to the succession duties, especially on all property which did not go to make a moderate provision for widows and children. Or perhaps both plans might be adopted, though I incline to think that the greater part of any increased taxation on unearned property should take the form of a heavier duty when it passes and repasses for the first time into the hands of those who have done nothing to earn it. A higher rate of Income-tax on unearned than on precarious income would be fairer in principle, and would remove much of the discontent with the tax which makes Chancellors of the Exchequer court popularity by reducing it, and it would be very desirable to introduce it.

On the other hand, a heavy succession duty is paid once for all in a lifetime, and those who come into land or money by the fortunate accident of having been born, have no reason to complain if their windfall turns out to be somewhat less than it would have been if they could have kept the whole and transferred the burden to their less fortunate brethren who have nothing but what they have worked for.

It is, however, in regard to local taxation that the distinction between

earned and unearned income is of most importance. Let me give a practical instance of what is meant by the "unearned increment."

There is a mountain valley in Wales the value of which for agricultural purposes might be at the outside £800 a year. But coal and iron were discovered in it; a set of capitalists took a lease, sunk pits, and erected works, and a town sprang up. The first and second set of capitalists lost their money; and about £1,000,000 was sunk in the concern, which ultimately passed into the hands of a third set for about £200,000, and with this reduced capital is now a fairly flourishing company. But all the time wages were paid, and the population increased until it numbered over 8000.

As regards the landlord the result was this: that his £800 was converted into £8000 a year, which has been punctually paid through good times and bad, and represents a capitalized value of probably £160,000. This is as purely a stroke of luck as if he had won the amount at Monte Carlo or by backing a Derby winner; indeed, more so, for in that case he must have stood to lose as well as to win, while in this actual instance he risked nothing. Again, he would not have received this windfall if the law of England had been like that of many other countries, in which minerals below the soil belong to the State or the Commune. Surely in such a case as this the unearned increment ought to contribute largely towards the local rates for providing sewers, water supply, schools, and other requisites of civilized existence in the town to which the owner of the soil was indebted for this enormous increase of his wealth.

The same thing applies with equal force to the immense unearned increment which has accrued to the fortunate owners of the soil from the growth of industry and population in large towns. It ought to contribute largely towards local rates, and be held under conditions not fixed solely by the landlord's right to make the most he can of his own, but by a due regard for the welfare of the community by which the additional value of the property has been created.

To sum up: if, to use a bold figure of speech, I were Chancellor of the Exchequer, I should look forward to framing a "Budget of the future" on something like the following lines;

1. To equalize the succession duties on real and personal property, and raise the amount to a sufficient figure to enable me to repeal the tax on tea.
2. To reform the Income-tax on the principle of charging a higher rate on unearned than on earned income.
3. To assign the "unearned increment" in towns and from mines and royalties to Local Boards, as a subject for local taxation within equitable limits, in aid of rates for local purposes.
4. To raise by loan a sufficient sum (say £50,000,000) to be spent over five or six years in placing the army and navy, but especially the navy, on a footing which, according to a programme

prepared by practical authorities, would be sufficient to place the defences of the Empire on to a reasonably secure footing.

5. To intrust the carrying out of this programme, under the supervision of Government and of Parliament, to permanent Commissions of the best practical men in each department, with large powers and clearly-defined responsibilities.
6. To provide for the interest and sinking fund of this loan by appropriating to it the saving from the recent Conversion of National Debt and a slight reduction of the sinking fund now appropriated towards paying off its capital.

CHAPTER XIV.

POPULATION AND FOOD.

THE Malthusian theory that population tends to increase faster than food is one which, at first sight, seems to commend itself by the mere statement. The particular ratio of increase may not be exactly that of geometrical to arithmetical progression, but the general fact appears to be incontestible that a single pair, whether of the human or of any other animal race, would in a comparatively short time increase and multiply beyond any conceivable increase in the supply of food available for their support from a limited area. It is, in fact, only a particular instance of that struggle for life, which Darwin has shown to be going on throughout all branches of creation, and which ends in the weaker going to the wall, and the survival of the fittest. It is illustrated clearly in the animal world as by the swarms of rabbits which, in a few years have overrun the pastures of Australia and New Zealand, from the progeny of single pairs.

And yet when we come to test the theory by facts, nothing can be more evident than that in the recent history of the civilized nations of Europe and America, the direct contrary has taken place, and food has increased faster than population. Take the instance of England. The population of Great Britain has increased in less than a century from fifteen to over thirty millions, and yet it is clearly demonstrated by statistics that each one of the thirty millions gets a far larger average share of food and other commodities than fell to the lot of the smaller number.

Bread, the staff of life, has fallen with the price of wheat to a far lower level than it stood at when the population was half the present amount, and what is even more important, instead of fluctuating widely from year to year, the price remains nearly uniform at this low level. The quantity of wheat and flour imported from foreign countries has risen in less than 50 years from 42 lbs. per head of the smaller, to 220 lbs. per head of the larger population; that of bacon and hams from almost nothing to 14 lbs. per head; of cheese, from 1 to 6 lbs.; of eggs, from 4,000,000 to 22,000,000; and of other articles of consumption, such as tea, sugar, butter, and rice, in proportion. Butcher's meat alone has slightly risen in price, and this is being reduced by the importation of frozen carcasses from the United States, Canada, the Argentine Republic, Australia and New Zealand.

At the same time, while prices have greatly fallen, the purchasing power of the community has been largely augmented. The average money wages of the laboring classes have nearly doubled, deposits in savings banks have increased from £16,000,000, to over £80,000,000 and each *id.* in the pound of income-tax produces £2,000,000 instead of £1,000,000.

In America, the refutation of the Malthusian theory has been even more signal. The population of the United States has increased in little more than a century from six to sixty millions, fully realizing the rate of increase by geometrical progression assumed by Malthus. And yet the production of food has increased so much more rapidly, that not only are the sixty millions better fed than any other nation in the world, but a surplus remains for exportation, which feeds probably not less than fifteen or twenty millions of mouths in foreign countries.

How is a fact to be explained, which stands in such flat contradiction to what seems at first sight an almost self-evident theory? The answer is obvious. The increased command over the powers of nature given by the practical application of modern science, has not only increased the productiveness of limited areas, but what is more important, has by means of railways, steamers, and telegraphs, enormously extended the area from which supplies can be drawn. Wheat grown and cattle reared one thousand miles west of Chicago, reach Liverpool and London as cheaply as they used to do from an English or Scotch county.

India, Australia, New Zealand, California, and the Argentine States pour their surplus food products into the markets of Europe. The compound marine engine cheapens freights, and lower freights bring with them lower rents, agricultural depression, and a serious aggravation of the Irish question. At the same time the same agencies triple and quadruple the power of producing commodities wherewith to buy food, by the consuming nations which no longer grow enough on their own soil to feed their population.

As long as this goes on, progress continues; a larger number of human souls live in the world, and the vast majority of them live better. We can afford to dismiss Malthus and his theory to a remote future, and look on it as a bogey no more affecting practical action than the prospect of the world coming to an end by the dissipation in space of solar heat.

But is it really so? The Irish famine is there to teach us a sharp lesson, that under given circumstances three millions out of eight of a population may disappear from the effects of famine and pestilence brought about by overcrowding. True the circumstances were exceptional, and traceable to a considerable extent to bad laws and bad government, but when we come to look closer into the matter we shall find that this inexorable law of Malthus is not reversed or repealed, but merely suspended, and hangs like the sword of Damocles by a thread over the head of future generations.

Behind the steam-plows and reaping-machines, behind the railways and steamers, lies the fundamental fact that there must be a reserve of unoccupied land on which to employ them.

Suppose all North America west of the Great Lakes and the Mississippi had been an arid desert like the Sahara, where would have been the food-products on which so many millions in the Old and New Worlds depend for their daily bread? No competition of railways, no improvement of steamers could have brought wheat, flour, beef, and pork from regions where they were not produced. Nor could they be exported in continually increasing quantities from countries where surplus land was getting scarce, and the native population was already beginning to press closely on the means of subsistence. In a comparatively few years cultivation will have spread up to the base of the Rocky Mountains, and there will be an urban population of ten or fifteen millions to feed in Chicago, St. Louis, and other cities of the West; while New York, Boston, Philadelphia, and the great manufacturing and mining Eastern and Middle States will constantly require larger supplies.

It is stated in a recent article in the *Century Magazine*, that the total arable and pasture land in the United States is estimated at 960,000,000 acres, of which 700,000,000 has been already taken up, leaving only 260,000,000 acres, which will certainly be all appropriated in a few years, while the population, at the present rate of increase, will be 120,000,000 by the year 1920. The United States, therefore, will in a very few years be brought face to face with the difficult problem, "a rapidly increasing population, and all the arable land in the hands of private owners."

When we come to survey the extent of the remaining reserve of land on which the fabric of progressive civilized society so mainly depends, it is startling to find how little of it is left. By far the greater portion of the earth's surface is excluded, either by climate or by prior occupation. In the Old World scarcely anything is left. Tropical regions are, for obvious reasons, unavailable, either as fields for emigration or for producing a supply of the staple foods required for the support of the principal white races. The highlands of Central Africa might possibly support a white population, but they are already occupied by native races. So also is South Africa, except to a limited extent at its southern extremity. Central and Eastern Asia are either desert and mountain, or occupied by the already swarming millions of India and China. The vast territory of the Russian empire is wanted for the rapidly increasing population of Russians, which, in Russia in Europe alone, has risen in less than a century from thirty-five to eighty-eight millions. The climate of Siberia is too rigorous, the distance by land too great, and the Arctic Ocean too inaccessible for it to become a great grain-exporting country. Western Asia, formerly the seat of a dense population, great cities, and active commerce, remains a comparative desert under Turkish rule. But even here the difficulty of prior occupation exists, and although the governments might be got rid

of, it would not be so easy to dispose of the twenty or thirty millions of Turks, Arabs, and Persians who already occupy, however sparsely, the regions which, down to the fall of the Roman Empire, supported such a vast population.

In Europe it is obvious that all the principal States are already overcrowded, in the sense of having no reserves of land, and a larger population than the soil can supply with food. It is only on the Lower Danube, and in some parts of European Turkey, that some reserves still remain, and these are to an extent quite inappreciable as compared with the wants of Western Europe, and not more than will be filled up in a generation or two by the Bulgarian and other native Christian races.

America and Australia remain ; but here it must be observed, that for providing the surplus population of Europe with food, only those districts are available which produce what may be called the staff of life. Practically this means wheat-growing districts. Thus Brazil may produce coffee and sugar, Florida oranges, and Southern California grapes and peaches ; but valuable as these are as luxuries, and as articles of commerce, people can not live on them ; and to go on as we are going, we want cheap and ever-increasing supplies of bread and meat. Even the great ranges of pasture land which support vast herds and flocks in America and Australia supply a very small per centage of food per acre, compared with the arable lands which grow the cereals and fatten pigs and cattle.

These may be defined generally as the wheat-producing belt. When this is exhausted, no increase of tropical products, and no extension of commerce and manufactures can arrest the inevitable result of an increasing population.

Now of this the area is limited and is rapidly being filled up. The largest supply has hitherto come from the states east of the Mississippi, Ohio, Illinois, Indiana, and Michigan. But these, which used to be the Western, have now become Central States, and the mass of food products, of which Chicago is the centre, comes from new Western states, such as Iowa, Minnesota, Wisconsin, and Kansas.

The agricultural portion of the United States is very near advancing further west, through new states and territories, towards the base of the Rocky Mountains, and has overleapt these, and brought California, Oregon, and Washington territory into the position occupied by the older states not twenty years ago of food-exporting districts.

The centre of gravity, as it has been called, of the population of the United States, which a century ago was almost on the Atlantic, is now west of Cincinnati, and is moving uniformly westwards at the average rate of about five miles per annum ; while the advanced guard of cultivation is moving still more rapidly towards the Rocky Mountains on a broad frontage from Texas to Dakota ; while the Pacific states, California and Oregon, are filling up with even greater rapidity. As we have already seen, the United States will in a very

few years be brought face to fact with Malthus's theory of a population growing by geometrical progression to an amount which no longer leaves any unoccupied land available for the production of surplus food.

Fortunately a very large reserve of land remains in the north-western districts of Canada, for experience has shown that, owing to the bending of the isothermal lines to the south, an immense extent of territory, reaching almost to the Polar Sea, which was recently thought to be as barren as the tundras of Siberia, is in reality capable of producing fine crops of wheat. The report of the Canadian Senate Committee of 1888 estimates the area adapted for the cultivation of wheat in this territory at 202,240,000 acres, and that adapted for pasture 512,000,000 acres, making a total reserve equal to that of the whole original territory of the United States, and promising a long respite before the inexorable pinch of Malthus's law is fully felt.

But the growth of an urban and manufacturing population is increasing with such rapidity in the New World, that the home market will soon absorb the greater part of the home produce. Chicago does not add 100,000 to its population every ten years without consuming more of the bread and meat which would be otherwise exported; and the same may be said of St. Louis, Pittsburg, Cincinnati, Cleveland, and the numerous large cities and industrial centres which are everywhere springing up in the States, which have been reclaimed from the Indian and the buffalo. And in Canada itself the same process is going on, though not so rapidly. Say that the United States will, in the next fifty years, have increased its population from 60,000,000 to 120,000,000, how much surplus food will remain over for exportation to Europe?

The tendency of population to accumulate in towns, and the increasing proportion of industrial to agricultural pursuits which are such marked features in England, are already producing similar effects in America. A century ago less than four per cent. of the total population of the United States lived in towns, the rest living in the country, and being mainly agricultural. Today about twenty-five per cent. of the population of the United States is urban, and of the remainder a large and increasing number live by industrial pursuits other than agriculture. In all the older States, such as Pennsylvania, New York, and New England, the number of food-consumers far exceeds that of food-producers, and a large proportion of the native population migrates westwards every year in search of land on which to settle. Even Central States, like Ohio, are becoming too densely settled for an agricultural population, and sending out contingents to swell the flood of westward emigration.

Europe also continues to pour in an enormous flood of emigration. During the last fifty years upwards of 10,000,000 of European emigrants have landed in the United States, of whom about 3,500,000 have come from Germany, and an equal number from Ireland. Many of these have settled on land, or become agricultural laborers, while others have taken

the places of native-born Americans who have become food-producers. Thus the existence of this vast field for emigration has benefited the old countries, both by affording an outlet for their surplus population, and by increasing the production of the world's surplus food. But this, again, depends on the existence of surplus land, and the operation of such powerful causes tends every day to use it up.

Already the approaching scarcity of land is showing itself by a great rise in the market value of real estate throughout the United States. It is not too much to say, that the price per acre of cultivated land, or land fit for cultivation from soil, climate, and proximity to any one of the four or five great railways which now span the continent, has risen on the average thirty or forty per cent. in the last three or four years, and in California the rise has been even greater. Railways are to a great extent responsible for this result; but while they tend, in the first instance, to increase largely the area of emigration and production, they accelerate the process by which reserves are used up, and the progress of population overtakes that of surplus food. Assuming with Malthus that the ratio between the two is that of geometrical to arithmetical progression, it is certain that, although with a large common difference, the latter may at first outstrip the former, it will soon be left far behind. Thus if we take the series

Population,	2,	4,	8,	16,	32,	64,	128
Food,	2,	12,	22,	32,	42,	52,	62

it is evident that while for the first five terms of the series food keeps ahead, and the condition of the population improves, after the fifth term the proportion between them is reversed, and very soon becomes one in which existence would be impossible without some very severe and far-reaching checks on the natural rate of increase of births over deaths. It is probable that we are not very far removed now from the third or fourth stage of this progression, and the next generation or the one after will have to face very seriously the question of what checks nature has provided, and what measures it will be necessary to take to prevent, or mitigate as far as possible, the inevitable results of the struggle for existence.

In the first place, however, it is necessary to consider what prospect there may be of increasing the supply of food produced in the older countries. I am afraid it is very little. England might conceivably support a larger agricultural population if it were cut up into small holdings of five or ten acres each. But manifestly this could only be done by lowering the general average scale of living, and descending from wheat to potatoes. To support a family by farming in decency and comfort, and have a surplus produce to sell, it is essential, under our conditions of soil and climate, that farms should be large enough to admit of cultivation by the plow and a rotation of crops. This means that there must be at least five or six fields of five or six acres each—two in grain, one in green

crops, one in sown grass or clover for hay, and two in permanent or second year grass or fallow. Thirty or forty acres is therefore the minimum size of farms on which an agricultural population can live up to the standard of well paid laborers and artisans, unless in a few exceptional cases of market gardens and holdings near large towns; and any further subdivision on an extensive scale would only land us in the state of Ireland.

Cottage allotments are often excellent things as a supplement to labor, but as the sole support of a large population they can only lead to one result, that of semi-starvation on half rations of potatoes. Moreover, the question is not one of food only, but of surplus food. If four or five millions more could live on the soil of England if cut up into small holdings by consuming their own produce, what would become of the remaining millions who are not agriculturists, and half of whom are now fed by the surplus produce of British agriculture? Large farms may not produce so much in the aggregate as the same area would do in small holdings, though this is doubtful, but it is beyond doubt that they produce more surplus for sale, after feeding those who are actually employed. And there is no doubt also that, as in Ireland, a population living poorly on small holdings tends to increase more rapidly than the normal rate under more favorable conditions.

It is a formidable question also, how long we can depend on the outlet for a surplus population which is afforded by emigration. Already the countries which have given a hospitable reception to so many millions of the poorer class of emigrants are beginning to show an unwillingness to receive an unlimited amount of cheap labor. The United States prohibit the importation of Chinese, and are becoming more particular every day as to the admission of destitute European emigrants. The Australian colonies are ceasing to tax themselves in order to assist emigration, and Canada and New Zealand are almost the only colonies left where a farther influx of emigrants seems to be desired. Even here there is no opening for the pauperized classes whom, in our own interest, we should be most anxious to get rid of. Emigration will doubtless go on, for, as we see in the case of Ireland, with many millions of Irish already settled in new countries, and the passage reduced to a question of ten days in time and £5 in money, there is an irresistible tendency impelling the Irish of old Ireland to follow in the footsteps of their friends and relations. Labor, like water, seeks to find its level, and nothing but invincible barriers of ignorance and repressive legislation can prevent men going from a country where wages are a shilling to one where they are a dollar a day. But there is danger that by this process the old countries may be gradually drained of the most able-bodied, intelligent, and energetic portion of their population, and left with more and more of an unmanageable residuum. We must recollect also that the rapid rate of increase which has tripled the population of England during the present century has gone on concurrently with this tide of emigration, and unless it were to flow with increased

rapidity, each succeeding generation would find us with an ever-increasing surplus of mouths to feed, unless either the death-rate or the birth-rate were materially altered. And the same thing applies not to England only, but to every European country except France. Russia is rapidly filling up her immense empire; Germany, Italy, and Belgium are full to overflowing, and send out swarms of emigrants; Spain sends a surplus to Buenos Ayres; Portugal to Brazil.

We must look, therefore, to external checks to maintain the balance between food and population in the not far distant time when the world's reserves of arable land are approaching towards exhaustion.

Of such checks the general remark may be made, that in modern history they all tend to operate with diminishing force, so that the natural increase of population is continually accelerated. What were the checks which, in retracing the history of the human race, we find to have been principally operative? Infanticide, war, pestilence, and famine. Infanticide has long since died out, except among a few savage tribes, though it can be traced as once an important operating cause in the traditions of polyandry and descent through the female line, which point to a deficiency in the female population only to be accounted for by female infanticide. But we can no more look to it as a possible check in the future than we can to a reversion to the stone implements of our palæolithic ancestors. War has been in all ages a principal, and is still an important check. But apart from the outcome of the growing feeling that war is for the most part a mistake, the conditions of modern warfare have so greatly changed that even great wars no longer play the important part they once did in checking population. In the first place they are much shorter. A thirty years' war devastating all Central Europe, and throwing its civilization back for a couple of generations, is no longer possible. Invasions of barbarians like those of Goths, Huns, and Turks, which reduced populous provinces to deserts, are no longer to be feared. Contrast the invasion of Attila which rolled westward to Chalons, over the plains of Champagne, with the advance of the Germany army only the other day over the same line of march. Burning towns and villages, slaughtered heaps of their inhabitants, droves of captive women and children, marked the line of the Hunnish advance; while in the Franco-German war we read of the peasant girls of Champagne standing unalarmed at their cottage doors to gaze on the Crown Prince and his brilliant staff.

Even the gigantic wars of the first Napoleon produced no very perceptible or permanent effect on the population of Europe. A certain number of able-bodied men were swept away, but their removal left room for others, the rising generations married a little earlier and the population grew up almost as rapidly as the grass over the blood-stained fields of Borodino and Waterloo. It is a remarkable fact that the rate of increase of the population of England was highest in the first twenty years of the

present century, during fifteen years of which we were engaged in a gigantic war with Napoleon. The vast standing armies of recent years are fed mainly by recruits taken at an early age from the population, and restored to it, invigorated in mind and body, after a short service of three or four years. Germany, with its three millions of soldiers, may show signs of financial pressure, but none hitherto of declining population.

Pestilence in times past has played a great part in keeping down excess of population. The black death in the reign of Edward III. is reported to have swept away nearly a third of the population of England, and to this day large parish churches, often standing within a stone's throw of one another, in Norfolk, testify to the existence of a dense population where now there are only a few large farmers and agricultural laborers. The sweating sickness, plague, and small-pox also counted their victims by millions, and defective sanitary arrangements kept the death-rate high almost down to the present day. But science and sanitation, aided by better food, clothing, and lodging, have of late years rapidly brought down and are still bringing down the death-rate, and even since the tables of the principal Life Assurances Offices were framed, the average duration of life has been lengthened by from five to ten per cent.

Famine remains, and in some of the Eastern countries of old civilization and dense population it is still the main check by which Nature asserts the inexorable law of the struggle for existence. But in European countries generally, the establishment of settled order, the accumulation of wealth, and above all the improvement of communications, have for a long time past prevented scarcity from degenerating into famine. England especially, as long as present conditions continue, and there is surplus food left anywhere in the world, is not likely to see famine an effective operating cause in checking the advance of population.

In one instance, however, at our own doors and in our own days, we have seen that Nature, "red in tooth and claw," asserts its inevitable laws even by this extreme and cruel remedy. The redundant population of Ireland has been reduced from eight to five millions by famine, and its results, fever and forced emigration. There has been no such destruction of life and arrest of the progress of population since the black death. The causes no doubt were exceptional, and we can place our fingers on them. Long years of oppression, bad legislation, and a vicious land system led to the multiplication of a pauper population reduced to the very lowest subsistence on the precarious potato, with the life-blood of the country, which should have accumulated capital in the form of the multiplied little savings of individual cultivators, drained from them by alien and absentee landlords; and all hope, providence, and energy crushed out of them by the knowledge that they were liable to be rack-rented on their own improvements.

This important lesson may be learned from the experience of Ireland,

that when a population is brought down, by unfavorable circumstances, to a very low standard of food and comfort, the immediate tendency is not to retard but to accelerate the rate of increase. Where there is nothing to look forward to from providence, prudential restraints on early marriages cease to operate. In fact, as far as they operate at all they operate the other way, for the only chance for a man plunged in hopeless poverty is to have grown-up sons and daughters able to help him when he is getting old and past work. Half the population of Ireland who are tenants of small holdings, have for years past only been able to live and pay rents so as to keep a roof over their heads, by the aid of remittances from members of the family who had emigrated to America and Australia. Thus, as the condition of a people deteriorates, and food and employment become scarce, the pent-up fires accumulate more rapidly until nature relieves itself by some great explosion.

This brings us to the practical consideration of what is likely to happen in the future. As long as present conditions continue, and the reserve of food-producing land remains unexhausted, it is probable that England will progress and prosper. The condition of Ireland will improve by better legislation, and England and Scotland have such resources in their mineral wealth, their facilities of communication, their accumulated capital, and in the character and industrial aptitudes of their people, that as long as there is any surplus food in the world they will get the lion's share of it. The rate of progress is not even likely to slacken until we approach more nearly to the exhaustion of the world's reserves. More poverty there may be, for if five per cent. be a fair average of failures in the struggle for existence, owing to weakness of mind or body, unfavorable surroundings, and ill luck, five per cent. on forty millions is a larger figure than five per cent. was on twenty millions. But I see no reason to doubt that for many years to come the mass of the population will eat as good or better food, be paid as high or higher wages, work as short or shorter hours, deposit as much or more money in Savings Banks and Provident Societies, as they do at present. And although it is never safe to prophesy unless you know, it is not a very hazardous prediction that each *id* in the pound of income-tax will give future Chancellors of the Exchequer a larger rather than a smaller contribution to the national revenue.

Foreign competition does not much alarm me, for the inevitable tendency of manufacturing and mining labor in France, Germany, and Belgium must be to level up towards our standard, or else to explode in strikes and socialist revolutions, to which they are all much nearer than we are in this country. If we are behind any other nation, as for instance Germany, in technical education, we can and will apply a remedy, and with equal brains and more money we are not likely to be long outstripped in anything which intelligence and capital can cure.

The only really formidable competition I can imagine in the near

future would be from the United States of America, if they ever came to adopt President Cleveland's policy of taxing no free citizen for more than his share of necessary national expenditure, and thus incidentally were brought to abandon Protection. We should then have to compete in foreign markets with a people fully equal to our own in all essential qualities, and with the advantage of being more adaptable, more inventive, more eager to get on, and less under the influence of routine and prejudice; while in certain respects nature gives them an advantage, as in growing their own cotton, and having larger reserves of land and larger deposits of coal and iron. Even here, however, it is probable that competition would lead rather to the diversion of certain branches of our foreign trade into other channels and the substitution of others, than to a diminution of its aggregate amount, and there would be a large compensation to us from throwing open a market of sixty millions of people which is now greatly restricted by prohibitory tariffs.

It is not therefore in the near future that I anticipate any of the dangers and difficulties of a redundant population, but the present rate of progress cannot last for ever, and our prosperity, if not in one, then in a few generations, will eventually have to face them. The latest statistics, those of Professor Levasseur, show that since 1800 the population has increased

	MILLIONS
In the United Kingdom from	16½ to 37.
Russia in Europe	35 to 88.
German Empire	27 to 47.

while he estimates that between 1810 and 1874 the entire population of the world increased from 682,000,000 to 1,391,000 or about doubled. If anything like this rate of increase were maintained for another century, nature will obviously have to provide remedies.

Can we foresee what these remedies will be when reserves of land are approaching exhaustion and supplies of food begin to fail? Scarcely, for in these cases evolution works by its own laws rather than by any logical deduction of philosophers or politicians, and all we know is that there will be a "struggle for existence," and that "the fittest will survive." Still we may gather dimly from present and past experience, that there are two directions from which the inevitable checks may be expected to come. One from a diminution of the birth-rate owing to fewer and later marriages, as the result of education and improved conditions. We have seen in the case of Ireland that poverty tends to accelerate the birth-rate, and commonly the well-to-do and upper classes scarcely keep up their numbers unless recruited from below. As the mass of the population rise to a higher standard of respectability and comfort they will be less ready to risk falling below that standard by contracting early and imprudent marriages. The possession of property also, especially of property in land, is, as we may see in France, a powerful factor in checking the progress of population. In that

country, while the population of England, Germany, and Russia has more than doubled, the increase has only been during the same time from 33,000,000 to 38,000,000. Should these checks prove insufficient, I confess I can see no other outcome than an increase of the death-rate on a large scale, such as might come from the combination of war, pestilence, and famine, which would result from a general upheaval of the dangerous and discontented classes of the community, owing to distress and demagogic excitement. Society is safe enough against any irruption of outer barbarians, but it is not so safe against its own barbarians, who are accumulating in the slums of its great cities. Or rather, it is safe as long as it has only these barbarians to deal with, but not so safe if these are reinforced by multitudes of honest and well-intentional men, who are driven desperate by the difficulty of getting "a fair day's wages for a fair day's work."

The history of the Commune in Paris may be a lesson to us of the amount of death and destruction which might be occasioned by such an uprising. A month of such a Commune in London would bring about such a destruction of capital and credit as would throw millions out of employment, and reduce them to the dire necessity of cutting one another's throats or starving. Fortunately such a result is far distant, and at any rate we have the consolation of knowing, that if the States of civilized Europe are to be swallowed up by such a Polyphemus, our lot, like that of the man of many resources, the wise and much-enduring Ulysses, will probably come last. The tide of empire and civilization has hitherto followed the sun and flowed westward. It has reached the shores of the Atlantic and crossed over to the New World. When that New World is fully occupied, and the human tide reaches the Pacific, what will happen? Will it, like the army of lemmings in Lapland, march ever westward until it topples over into the ocean? We can only answer, it is a "Problem of the Future."

THE END.





THE WISDOM OF LIFE

By Arthur Schopenhauer

TRANSLATED WITH A PREFACE BY

T. BAILEY SAUNDERS, M. A.

११

Vitam impendere vero.—JUVENAL.

CONTENTS.

CHAP.	PAGE.
TRANSLATOR'S PREFACE,	245
INTRODUCTION	261
I. DIVISION OF THE SUBJECT	263
II. PERSONALITY, OR WHAT A MAN IS	263
III. PROPERTY, OR WHAT A MAN HAS	270
IV. POSITION, OR A MAN'S PLACE IN THE ESTIMATION OF OTHERS —	
Sect. 1. Reputation	294
" 2. Pride	299
" 3. Rank	301
" 4. Honor	301
" 5. Fame	324

TRANSLATOR'S PREFACE.

SCHOPENHAUER is one of the few philosophers who can be generally understood without a commentary. All his theories claim to be drawn direct from the facts, to be suggested by observation, and to interpret the world as it is; and whatever view he takes, he is constant in his appeal to the experience of common life. This characteristic endows his style with a freshness and vigor which would be difficult to match in the philosophical writing of any country, and impossible in that of Germany. If it were asked whether there were any circumstances, apart from heredity, to which he owed his mental habit, the answer might be found in the abnormal character of his early education, his acquaintance with the world rather than with books, the extensive travels of his boyhood, his ardent pursuit of knowledge for its own sake and without regard to the emoluments and endowments of learning. He was trained in realities even more than in ideas; and hence he is original, forcible, clear, an enemy of all philosophic indefiniteness and obscurity; so that it may well be said of him, in the words of a writer in the "Revue Contemporaine," *ce n'est pas un philosophe comme les autres, c'est un philosophe qui a vu le monde.*

It is not my purpose, nor would it be possible within the limits of a prefatory note, to attempt an account of Schopenhauer's philosophy, to indicate its sources, or to suggest or rebut the objections which may be taken to it. M. Ribot, in his excellent little book,* has done all that is necessary in this direction. But the essays here presented need a word of explanation. It should be observed, and Schopenhauer himself is at pains to point out, that his system is like a citadel with a hundred gates:

* La Philosophie de Schopenhauer, par Th. Ribot.

at whatever point you take it up, wherever you make your entrance, you are on the road to the centre. In this respect his writings resemble a series of essays composed in support of a single thesis; a circumstance which led him to insist, more emphatically even than most philosophers, that for a proper understanding of his system it was necessary to read every line he had written. Perhaps it would be more correct to describe *Die Welt als Wille und Vorstellung* as his main thesis, and his other treatises as merely corollary to it. The essays in these volumes form part of the corollary; they are taken from a collection published towards the close of Schopenhauer's life, and by him entitled *Parerga und Paralipomena*, as being in the nature of surplusage and illustrative of his main position. They are by far the most popular of his works, and since their first publication in 1851 they have done much to build up his fame. Written so as to be intelligible enough in themselves, the tendency of many of them is towards the fundamental idea on which his system is based. It may therefore be convenient to summarize that idea in a couple of sentences; more especially as Schopenhauer sometimes writes as if his advice had been followed and his readers were acquainted with the whole of his work.

All philosophy is in some sense the endeavor to find a unifying principle, to discover the most general conception underlying the whole field of nature and of knowledge. By one of those bold generalizations which occasionally mark a real advance in science, Schopenhauer conceived this unifying principle, this underlying unity, to consist in something analogous to that *will* which self-consciousness reveals to us. *Will* is, according to him, the fundamental reality of the world, the thing-in-itself; and its objectivation is what is presented in phenomena. The struggle of the will to realize itself evolves the organism, which in its turn evolves intelligence as the servant of the will. And in practical life the antagonism between the will and the intellect arises from the fact that the former is the metaphysical substance, the latter something accidental and secondary. And further, will is *desire*, that is to say, need of something; hence need and pain are what is positive in the world, and the only possible happiness is a negation, a renunciation of *the will to live*.

It is instructive to note, as M. Ribot points out, that in finding the origin of all things, not in intelligence, as some of his predecessors in philosophy had done, but in will, or the force of nature, from which all

phenomena have developed, Schopenhauer was anticipating something of the scientific spirit of the nineteenth century. To this it may be added, that in combating the method of Fichte and Hegel, who spun a system out of abstract ideas, and in discarding it for one based on observation and experience, Schopenhauer can be said to have brought down philosophy from heaven to earth.

In Schopenhauer's view, the various forms of Religion are no less a product of human ingenuity than Art or Science. He holds, in effect, that all religions take their rise in the desire to explain the world; and that, in regard to truth and error, they differ, in the main, not by preaching monotheism, polytheism or pantheism, but in so far as they recognize pessimism or optimism as the true description of life. Hence, any religion which looked upon the world as being radically evil appealed to him as containing an indestructible element of truth. I have endeavored to present his view of two of the great religions of the world in the extract which comes in the third volume, and to which I have given the title of *The Christian System*. The tenor of it is to show that, however little he may have been in sympathy with the supernatural element, he owed much to the moral doctrines of Christianity and of Buddhism, between which he traced great resemblance.

Of Schopenhauer, as of many another writer, it may be said that he has been misunderstood and depreciated just in the degree in which he is thought to be new; and that, in treating of the Conduct of Life, he is, in reality, valuable only in so far as he brings old truths to remembrance. His name used to arouse, and in certain quarters still arouses, a vague sense of alarm; as though he had come to subvert all the rules of right thinking and all the principles of good conduct, rather than to proclaim once again and give a new meaning to truths with which the world has long been familiar. Of his philosophy in its more technical aspects, as matter upon which enough, perhaps, has been written, no account need be taken here, except as it affects the form in which he embodies these truths or supplies the fresh light in which he sees them. For whatever claims to originality his metaphysical theory may possess, the chief interest to be found in his views of life is an affair of form rather than of substance; and he stands in a sphere of his own, not because he sets new problems or opens up undiscovered truths, but in the manner in which he approaches what has been already revealed.

He is not on that account less important; for the great mass of men

at all times require to have old truths imparted as if they were new—formulated, as it were, directly for them as individuals, and of special application to their own circumstances in life. A discussion of human happiness and the way to obtain it is never either unnecessary or uncalled for, if one looks to the extent to which the lives of most men fall short of even a poor ideal, or, again, to the difficulty of reaching any definite and secure conclusion. For to such a momentous inquiry as this, the vast majority of mankind gives nothing more than a nominal consideration, accepting the current belief, whatever it may be, on authority, and taking as little thought of the grounds on which it rests as a man walking takes of the motion of the earth. But for those who are not indifferent—for those whose desire to fathom the mystery of existence gives them the right to be called thinking beings—it is just here, in regard to the conclusion to be reached, that a difficulty arises, a difficulty affecting the conduct of life: for, while the great facts of existence are alike for all, they are variously appreciated, and conclusions differ, chiefly from innate diversity of temperament in those who draw them. It is innate temperament, acting on a view of the facts necessarily incomplete, that has inspired so many different teachers. The tendencies of a man's own mind—the Idols of the Cave before which he bows—interpret the facts in accordance with his own nature: he elaborates a system containing, perhaps, a grain of truth, to which the whole of life is then made to conform; the facts purporting to be the foundation of the theory, and the theory in its turn giving its own color to the facts.

Nor is this error, the manipulation of facts to suit a theory, avoided in the views of life which are presented by Schopenhauer. It is true that he aimed especially at freeing himself from the trammels of previous systems; but he was caught in those of his own. His natural desire was to resist the common appeal to anything extramundane—anything outside or beyond life—as the basis of either hope or fear. He tried to look at life as it is; but the metaphysical theory on which his whole philosophy rests, made it necessary for him, as he thought, to regard it as an unmixed evil. He calls our present existence an infinitesimal moment between two eternities, the past and the future, a moment—like the life of Plato's "Dwellers in the Cave,"—filled with the pursuit of shadows; where everything is relative, phenomenal, illusory, and man is bound in the servitude of ignorance, struggle and need, in the endless round of

effort and failure. If you confine yourself, says Schopenhauer, only to some of its small details, life may indeed appear to be a comedy, because of the one of two bright spots of happy circumstance to be found in it here and there; but when you reach a higher point of view and a broader outlook, these soon become invisible, and Life, seen from the distance which brings out the true proportion of all its parts, is revealed as a tragedy—a long record of struggle and pain, with the death of the hero as the final certainty. How then, he asks, can a man make the best of his brief hour under the hard conditions of his destiny? What is the true Wisdom of Life?

Schopenhauer has no pre-conceived divine plan to vindicate!; no religious or moral enthusiasm to give a roseate hue to some far-off event, obliging us in the end to think that all things work together for good. Let poets and theologians give play to imagination! he, at any rate, will profess no knowledge of anything beyond our ken. If our existence does not entirely fail of its aim, it must, he says, be *suffering*; for this is what meets us everywhere in the world, and it is absurd to look upon it as the result of chance. Still, in the face of all this suffering, and in spite of the fact that the uncertainty of life destroys its value as an end in itself, every man's natural desire is to preserve his existence; so that life is a blind, unreasoning force, hurrying us we know not whither. From his high metaphysical standpoint, Schopenhauer is ready to admit that there are many things in life which give a short satisfaction and blind us for the moment to the realities of existence,—pleasures as they may be called, in so far as they are a mode of *relief*; but that pleasure is not positive in its nature, nor anything more than the negation of suffering, is proved by the fact that, if pleasures come in abundance, pain soon returns in the form of satiety; so that the sense of illusion is all that has been gained. Hence, the most a man can achieve in the way of welfare is a measure of relief from this suffering; and if people were prudent, it is at this they would aim, instead of trying to secure a happiness which always flies from them.

It is a trite saying, that happiness is a delusion, a chimera, the *fata morgana* of the heart; but here is a writer who will bring our whole conduct into line with that, as a matter of practice; making pain the positive groundwork of life, and a desire to escape it the spur of all effort. While most of those who treat of the conduct of life come at last to the conclusion, more or less vaguely expressed, that religion and morality form a

positive source of true happiness, Schopenhauer does not professedly take this view ; though it is quite true that the practical outcome of his remarks tends, as will be seen, in support of it ; with this difference, however—he does not direct the imagination to anything outside this present life as making it worth while to live at all ; his object is to state the facts of existence as they immediately appear, and to draw conclusions as to what a wise man will do in the face of them.

In the practical outcome of Schopenhauer's ethics—the end and aim of those maxims of conduct which he recommends, there is nothing that is not substantially akin to theories of life which, in different forms, the greater part of mankind is presumed to hold in reverence. It is the premises rather than the conclusion of his argument which interest us as something new. The whole world, he says, with all its phenomena of change, growth and development, is ultimately the manifestation of Will—*Wille und Vorstellung*—a blind force conscious of itself only when it reaches the stage of intellect. And life is a constant self-assertion of this will ; a long desire which is never fulfilled ; disillusion inevitably following upon attainment, because the will, the thing-in-itself—in philosophical language, the *noumenon*—always remains as the permanent element ; and with this persistent exercise of its claim, it can never be satisfied. So life is essentially suffering ; and the only remedy for it is the freedom of the intellect from the servitude imposed by its master, the will.

The happiness a man can attain, is thus, in Schopenhauer's view, negative only ; but how is it to be acquired ? Some temporary relief, he says, may be obtained through the medium of Art ; for in the apprehension of Art we are raised out of our bondage, contemplating objects of thought as they are in themselves, apart from their relations to our own ephemeral existence, and free from any taint of the will. This contemplation of pure thought is destroyed when Art is degraded from its lofty sphere, and made an instrument in the bondage of the will. How few of those who feel that the pleasure of Art transcends all others, could give such a striking explanation of their feeling !

But the highest ethical duty, and consequently the supreme endeavor after happiness, is to withdraw from the struggle of life, and so obtain release from the misery which that struggle imposes upon all, even upon those who are for the moment successful. For as will is the inmost kernel of everything, so it is identical under all its manifestations ; and through the mirror of the world a man may arrive at the knowledge of himself.

The recognition of the identity of our own nature with that of others is the beginning and foundation of all true morality. For, once a man clearly perceives this solidarity of the will, there is aroused in him a feeling of *sympathy* which is the main-spring of ethical conduct. This feeling of sympathy must, in any true moral system, prevent our obtaining success at the price of others' loss. Justice, in this theory, comes to be a noble, enlightened self-interest; it will forbid our doing wrong to our fellow-man, because, in injuring him, we are injuring ourselves—our own nature, which is identical with his. On the other hand, the recognition of this identity of the will must lead to commiseration—a feeling of sympathy with our fellow-sufferers—to acts of kindness and benevolence, to the manifestation of what Kant, in the *Metaphysic of Ethics*, calls the only absolute good, *the good will*. In Schopenhauer's phraseology, the human will, in other words, *ἔρως*, the love of life, is in itself the root of all evil, and goodness lies in renouncing it. Theoretically, his ethical doctrine is the extreme of socialism, in a large sense; a recognition of the inner identity and equal claims, of all men with ourselves; a recognition issuing in *ἀγάπη*, universal benevolence, and a stifling of particular desires.

It may come as a surprise to those who affect to hold Schopenhauer in abhorrence, without, perhaps, really knowing the nature of his views, that, in this theory of the essential evil of the human will—*ἔρως*, the common selfish idea of life—he is reflecting, and indeed probably borrowing, what he describes as the fundamental tenet of Christian theology, that *the whole creation groaneth and travaileth in pain*,¹ standing in need of redemption. Though Schopenhauer was no friend to Christian theology in its ordinary tendencies, he was very much in sympathy with some of the doctrines which have been connected with it. In his opinion, the foremost truth which Christianity proclaimed to the world lay in its recognition of pessimism, its view that the world was essentially corrupt, and that the devil was its prince or ruler.² It would be out of place here to inquire into the exact meaning of this statement, or to determine the precise form of compensation provided for the ills of life under any scheme of doctrine which passes for Christian: and, even if it were in place, the task would be an extremely difficult one; for probably no system of belief has ever undergone, at various periods, more radical changes than Christianity. But whatever prospect of happiness it may have held out, at an early date of its history, it soon came to teach that

¹ Romans viii, 22.

² John xii., 31.

the necessary preparation for happiness, as a positive spiritual state, a *renunciation*, resignation, a looking away from external life to the inner life of the soul—a *kingdom not of this world*. So far, at least, as concerns its view of the world itself, and the main lesson and duty which life teaches, there is nothing in the theory of pessimism which does not accord with that religion which is looked up to as the guide of life over a great part of the civilized world.

What Schopenhauer does, is to attempt a metaphysical explanation of the evil of life, without any reference to anything outside it. Philosophy, he urges, should be *cosmology*, not *theology*: an explanation of the world, not a scheme of divine knowledge; it should leave the gods alone—to use an ancient phrase—and claim to be left alone in return. Schopenhauer was not concerned, as the apostles and fathers of the Church were concerned, to formulate a scheme by which the ills of this life should be remedied in another—an appeal to the poor and oppressed, conveyed often in a material form, as, for instance, in the story of Dives and Lazarus. In his theory of life as the self-assertion of will, he endeavors to account for the sin, misery and iniquity of the world, and to point to the way of escape—the denial of the will to live.

Though Schopenhauer's views of life have this much in common with certain aspects of Christian doctrine, they are in decided antagonism with another theory which, though, comparatively speaking, the birth of yesterday, has already been dignified by the name of a religion, and has, no doubt, a certain number of followers. It is the theory which looks upon the life of mankind as a continual progress towards a state of perfection, and humanity in its nobler tendencies as itself worthy of worship. To those who embrace this theory, it will seem, that because Schopenhauer does not hesitate to declare the evil in the life of mankind to be far in excess of the good, and that, as long as the human will remains what it is, there can be no radical change for the better, he is therefore outside the pale of civilization, an alien from the commonwealth of ordered knowledge and progress. But it has yet to be seen whether the religion of humanity will fare better, as a theory of conduct or as a guide of life, than either Christianity or Buddhism. If any one doctrine may be named which has distinguished Christianity wherever it has been a living force among its adherents, it is the doctrine of renunciation; the same doctrine which, in a different shape and with other surroundings, forms the spirit of Buddhism. With those great religions of the world which man-

kind has hitherto professed to revere as the most ennobling of all influences, Schopenhauer's theories, not perhaps in their details, but in the principle which informs them, are in close alliance.

Renunciation, according to Schopenhauer, is the truest wisdom of life, from the higher ethical standpoint. His heroes are the Christian ascetics of the Middle Age, and the followers of Buddha who turn away from the Sansara to the Nirvana. But our modern habits of thought are different. We look askance at the doctrines, and we have no great enthusiasm for the heroes. The system which is in vogue amongst us just now objects to the identification of nature with evil, and, in fact, abandons ethical dualism altogether. And if nature is not evil, where, it will be asked, is the necessity or the benefit of renunciation—a question which may even come to be generally raised, in a not very distant future, on behalf of some new conception of Christianity.

And from another point of view, let it be frankly admitted that renunciation is incompatible with ordinary practice, with the rules of life as we are compelled to formulate them; and that, to the vast majority, the doctrine seems little but a mockery, a hopelessly unworkable plan, inapplicable to the conditions under which men have to exist.

In spite of the fact that he is theoretically in sympathy with truths which lie at the foundation of certain widely revered systems, the world has not yet accepted Schopenhauer for what he proclaimed himself to be, a great teacher: and probably for the reason that hope is not an element in his wisdom of life, and that he attenuates love into something that is not a real, living force—a shadowy recognition of the identity of the will. For men are disinclined to welcome a theory which neither flatters their present position nor holds out any prospect of better things to come. Optimism—the belief that in the end everything will be for the best—is the natural creed of mankind; and a writer who of set purpose seeks to undermine it by an appeal to facts is regarded as one who tries to rob humanity of its rights. How seldom an appeal to the facts within our reach is really made! Whether the evil of life actually outweighs the good,—or, if we should look for better things, what is the possibility or the nature of a Future Life, either for ourselves as individuals, or as part of some great whole, or, again, as contributing to a coming state of perfection?—such inquiries claim an amount of attention which the mass of men everywhere is unwilling to give. But, in any case, whether it is a vague assent to current beliefs, or a blind reliance on a baseless certainty,

or an impartial attempt to put away what is false,—hope remains as the deepest foundation of every faith in a happy future.

But it should be observed that this looking to the future as a complement for the present is dictated mainly by the desire to remedy existing ills; and that the great hold which religion has on mankind, as an incentive to present happiness, is the promise it makes of coming perfection. Hope for the future is a tacit admission of evil in the present; for if a man is completely happy in this life, and looks upon happiness as the prevailing order, he will not think so much of another. So a discussion of the nature of happiness is not thought complete if it takes account only of our present life, and unless it connects what we are now and what we do here with what we may be hereafter. Schopenhauer's theory does not profess to do this; it promises no positive good to the individual; at most, only relief; he breaks the idol of the world, and sets up nothing in its place; and like many another iconoclast, he has long been condemned by those whose temples he has desecrated. If there are optimistic theories of life, it is not life itself, he would argue, which gives color to them; it is rather the reflection of some great final cause which humanity has created as the last hope of its redemption:—

*Heaven but the vision of fulfilled desire,
And hell the shadow from a soul on fire,
Cast on the darkness into which ourselves,
So late emerged from, shall so soon expire.¹*

Still, hope, it may be said, is not knowledge, nor a real answer to any question; at most, a makeshift, a moral support for intellectual weakness. The truth is, that as theories, both optimism and pessimism are failures; because they are extreme views where only a very partial judgment is possible. And in view of the great uncertainty of all answers, most of those who do not accept a stereotyped system leave the question alone, as being either of little interest, or of no bearing on the welfare of their lives, which are commonly satisfied with low aims; tacitly ridiculing those who demand an answer as the most pressing affair of existence. But the fact that the final problems of the world are still open, makes in favor of an honest attempt to think them out, in spite of all previous failure or still existing difficulty; and however old these problems may be, the endeavor to solve them is one which it is always worth while to encourage afresh. For the individual advantages which attend an effort

¹ Omar Khayyam; translated by E. Fitzgerald.

to find the true path accrue quite apart from any success in reaching the goal ; and even though the height we strive to climb be inaccessible, we can still see and understand more than those who never leave the plain. The sphere, it is true, is enormous—the study of human life and destiny as a whole ; and our mental vision is so ill-adapted to a range of this extent that to aim at forming a complete scheme is to attempt the impossible. It must be recognized that the data are insufficient for large views, and that we ought not to go beyond the facts we have, the facts of ordinary life, interpreted by the common experience of every day. These form our only material. The views we take must of necessity be fragmentary—a mere collection of *aperçus*, rough guesses at the undiscovered ; of the same nature, indeed, as all our possessions in the way of knowledge—little tracts of solid land reclaimed from the mysterious ocean of the unknown.

But if we do not admit Schopenhauer to be a great teacher,—because he is out of sympathy with the highest aspirations of mankind, and too ready to dogmatize from partial views,—he is a very suggestive writer, and eminently readable. His style is brilliant, animated, forcible, pungent ; although it is also discursive, irresponsible, and with a tendency to superficial generalization. He brings in the most unexpected topics without any very sure sense of their relative place ; everything, in fact, seems to be fair game, once he has taken up his pen. His irony is noteworthy ; for it extends beyond mere isolated sentences, and sometimes applies to whole passages, which must be read *cum grano salis*. And if he has grave faults as well as excellences of literary treatment, he is at least always witty and amusing, and that, too, in dealing with subjects—as here, for instance, with the Conduct of Life—on which many others have been at once severe and dull. It is easy to complain that though he is witty and amusing, he is often at the same time bitter and ill-natured. This is in some measure the unpleasant side of his uncompromising devotion to truth, his resolute eagerness to dispel illusion at any cost—those defects of his qualities which were intensified by a solitary and, until his last years, unappreciated life. He was naturally more disposed to coerce than to flatter the world into accepting his views ; he was above all things *un esprit fort*, and at times brutal in the use of his strength. If it should be urged that, however great his literary qualities, he is not worth reading because he takes a narrow view of life and is blind to some of its greatest blessings, it will be well to remember the profound truth of

that line which a friend inscribed on his earliest biography: *Si non errasset fecerat ille minus*,¹ a truth which is seldom without application, whatever be the form of human effort. Schopenhauer cannot be neglected because he takes an unpleasant view of existence, for it is a view which must present itself, at some time, to every thoughtful person. To be outraged by Schopenhauer means to be ignorant of many of the facts of life.

In this one of his smaller works, *Aphorismen zur Lebensweisheit*, Schopenhauer abandons his high metaphysical standpoint, and discusses, with the same zest and appreciation as in fact marked his enjoyment of them, some of the pleasures which a wise man will seek to obtain,—health, moderate possessions, intellectual riches. And when, as in this little work, he comes to speak of the wisdom of life as the practical art of living, the pessimist view of human destiny is obtruded as little as possible. His remarks profess to be the result of a compromise—an attempt to treat life from the common standpoint. He is content to call these witty and instructive pages a series of aphorisms; thereby indicating that he makes no claim to expound a complete theory of conduct. It will doubtless occur to any intelligent reader that his observations are but fragmentary thoughts on various phases of life; and, in reality, mere *aphorisms*—in the old, Greek sense of the word—pithy distinctions, definitions of facts, a marking-off, as it were, of the true from the false in some of our ordinary notions of life and prosperity. Here there is little that is not in complete harmony with precepts to which the world has long been accustomed; and in this respect, also, Schopenhauer offers a suggestive comparison rather than a contrast with most writers on happiness.

The philosopher in his study is conscious that the world is never likely to embrace his higher metaphysical or ethical standpoint, and annihilate the will to live; nor did Schopenhauer himself do so except so far as he, in common with most serious students of life, avoided the ordinary aims of mankind. The theory which recommended universal benevolence as the highest ethical duty, came, as a matter of practice, to mean a formal standing-alooft—the *ne plus ultra* of individualism. The Wisdom of Life, as the practical art of living, is a compromise. We are here not by any choice of our own; and while we strive to make the best of it, we must not let ourselves be deceived. If you want to be happy, he says, it will not do to cherish illusions. Schopenhauer would have found nothing admirable in the conclusion at which the late M. Edmond

¹ Slightly altered from Martial. Epigram: I. xxii.

Scherer, for instance, arrived. *L'art de vivre*, he wrote in his preface to Amiel's *Journal*, *c'est de se faire une raison, de souscrire au compromis, de se prêter aux fictions*. Schopenhauer conceives his mission to be, rather, to dispel illusion, to tear the mask from life ;—a violent operation, not always productive of good. Some illusion, he urges, may profitably be dispelled by recognizing that no amount of external aid will make up for inward deficiency; and that if a man has not got the elements of happiness in himself, all the pride, pleasure, beauty and interest of the world will not give it to him. Success in life, as gauged by the ordinary material standard, means to place faith wholly in externals as the source of happiness, to assert and emphasize the common will to live, in a word, to be *vulgar*. He protests against this search for happiness—something subjective—in the world of our surroundings, or anywhere but in a man's own self ; a protest the sincerity of which might well be imitated by some professed advocates of spiritual claims.

It would be interesting to place his utterances on this point side by side with those of a distinguished interpreter of nature in this country, who has recently attracted thousands of readers by describing *The Pleasures of Life*; in other words, the blessings which the world holds out to all who can enjoy them—health, books, friends, travel, education, art. On the common ground of their regard for these pleasures there is no disagreement between the optimist and the pessimist. But a characteristic difference of view may be found in the application of a rule of life which Schopenhauer seems never to tire of repeating ; namely, that happiness consists for the most part in what a man is in himself, and that the pleasure he derives from these blessings will depend entirely upon the extent to which his personality really allows him to appreciate them. This is a rule which runs some risk of being overlooked when a writer tries to dazzle the mind's eye by describing all the possible sources of pleasure in the world of our surroundings ; but Sir John Lubbock, in common with everyone who attempts a fundamental answer to the question of happiness, cannot afford to overlook it. The truth of the rule is perhaps taken for granted in his account of life's pleasures ; but it is significant that it is only when he comes to speak of life's troubles that he freely admits the force of it. *Happiness*, he says, in this latter connection, *depends much more on what is within than without us*. Yet a rigid application of this truth might perhaps discount the effect of those pleasures with which the world is said to abound. That happiness as

well as unhappiness depends mainly upon what is within, is more clearly recognized in the case of trouble ; for when troubles come upon a man, they influence him, as a rule, much more deeply than pleasures. How few, even amongst the millions to whom these blessings are open—health, books, travel, art—really find any true or permanent happiness in them !

While Schopenhauer's view of the pleasures of life may be elucidated by comparing it with that of a popular writer like Sir John Lubbock, and by contrasting the appeals they severally make to the outer and the inner world as a source of happiness ; Schopenhauer's view of life itself will stand out more clearly if we remember the opinion so boldly expressed by the same English writer. *If we resolutely look*, observes Sir John Lubbock, *I do not say at the bright side of things, but at things as they really are; if we avail ourselves of the manifold blessings which surround us; we cannot but feel that life is indeed a glorious inheritance.*¹ There is a splendid excess of optimism about this statement which well fits it to show up the darker picture drawn by the German philosopher.

Finally, it should be remembered that, though Schopenhauer's picture of the world is gloomy and sombre, there is nothing weak or unmanly in his attitude. If a happy existence, he says,—not merely an existence free from pain—is denied us, we can at least be heroes and face life with courage: *das höchste was der Mensch erlangen kann ist ein heroischer Lebenslauf*. A noble character will never complain at misfortune ; for if a man looks round him at other manifestations of that which is his own inner nature, the will, he finds sorrows happening to his fellow-men harder to bear than any that have come upon himself. And the ideal of nobility is to deserve the praise which Hamlet—in Shakespeare's Tragedy of Pessimism—gave to his friend :

*Thou hast been
As one, in suffering all, that suffers nothing.*

But perhaps Schopenhauer's theory carries with it its own correction. He describes existence as a more or less violent oscillation between pain and boredom. If this were really the sum of life, and we had to reason from such a partial view, it is obvious that happiness would lie in *action*; and that life would be so constituted as to supply two natural and inevitable incentives to action, and thus to contain in itself the very conditions of happiness. Life itself reveals our destiny. It is not the struggle

¹ The Pleasures of Life. Part I., p. 5.

which produces misery, it is the mistaken aims and the low ideals—*was uns alle bündigt, das Gemeine!*

That Schopenhauer conceives life as an evil is a deduction, and possibly a mistaken deduction, from his metaphysical theory. Whether his scheme of things is correct or not—and it shares the common fate of all metaphysical systems in being unverifiable, and to that extent unprofitable—he will in the last resort have made good his claim to be read by his insight into the varied needs of human life. It may be that a future age will consign his metaphysics to the philosophical lumber-room; but he is a literary artist as well as a philosopher, and he can make a bid for fame in either capacity.

T. B. S.

INTRODUCTION.

IN these pages I shall speak of *The Wisdom of Life* in the common meaning of the term, as the art, namely, of ordering our lives so as to obtain the greatest possible amount of pleasure and success; an art the theory of which may be called *Eudæmonology*, for it teaches us how to lead a happy existence. Such an existence might perhaps be defined as one which, looked at from a purely objective point of view, or, rather, after cool and mature reflection—for the question necessarily involves subjective considerations,—would be decidedly preferable to non-existence; implying that we should cling to it for its own sake, and not merely from the fear of death; and further, that we should never like it to come to an end.

Now whether human life corresponds, or could possibly correspond, to this conception of existence, is a question to which, as is well-known, my philosophical system returns a negative answer. On the eudæmonistic hypothesis, however, the question must be answered in the affirmative; and I have shown, in the second volume of my chief work (ch. 49), that this hypothesis is based upon a fundamental mistake. Accordingly, in elaborating the scheme of a happy existence, I have had to make a complete surrender of the higher metaphysical and ethical standpoint to which my own theories lead; and everything I shall say here will to some extent rest upon a compromise; in so far, that is, as I take the common standpoint of every day, and embrace the error which is at the bottom of it. My remarks, therefore, will possess only a qualified value, for the very word *eudæmonology* is a euphemism. Further, I make no claims to completeness; partly because the subject is inexhaustible, and partly because I should otherwise have to say over again what has been already said by others.

1

The only book composed, as far as I remember, with a like purpose to that which animates this collection of aphorisms, is Cardan's *De utilitate ex adversis capienda*, which is well worth reading, and may be used to supplement the present work. Aristotle, it is true, has a few words on eudæmonology in the fifth chapter of the first book of his *Rhetoric*; but what he says does not come to very much. As compilation is not my business, I have made no use of these predecessors; more especially because, in the process of compiling, individuality of view is lost, and individuality of view is the kernel of works of this kind. In general, indeed, the wise in all ages have always said the same thing, and the fools, who at all times form the immense majority, have in their way too acted alike, and done just the opposite; and so it will continue. For, as Voltaire says, *we shall leave this world as foolish and as wicked as we found it on our arrival.*



THE WISDOM OF LIFE

CHAPTER I.

DIVISION OF THE SUBJECT.

A RISTOTLE' divides the blessings of life into three classes—those which come to us from without, those of the soul, and those of the body. Keeping nothing of this division but the number, I observe that the fundamental differences in human lot may be reduced to three distinct classes :

(1) What a man is : that is to say, personality, in the widest sense of the word; under which are included health, strength, beauty, temperament, moral character, intelligence and education.

(2) What a man has : that is, property and possessions of every kind.

(3) How a man stands in the estimation of others : by which is to be understood, as everybody knows, what a man is in the eyes of his fellow-men, or, more strictly, the light in which they regard him. This is shown by their opinion of him; and their opinion is in its turn manifested by the honor in which he is held, and by his rank and reputation.

The differences which come under the first head are those which Nature herself has set between man and man; and from this fact alone we may at once infer that they influence the happiness or unhappiness of mankind in a much more vital and radical way than those contained under the two following heads, which are merely the effect of human arrangements. Compared with *genuine personal advantages*, such as a great mind or a great heart, all the privileges of rank or birth, even of royal birth, are but as kings on the stage to kings in real life. The same thing was said long ago by Metrodorus, the earliest disciple of Epicurus, who wrote as the title of one of his chapters, *The happiness we receive from ourselves is greater than that which we obtain from our surroundings.*² And it is an obvious fact, which cannot be called in question, that the principal

¹ *Eth. Nichom.*, I. 8.

² Cf. Clemens Alex. Strom. II., 21.

element in a man's well-being,—indeed, in the whole tenor of his existence,—is what he is made of, his inner constitution. For this is the immediate source of that inward satisfaction or dissatisfaction resulting from the sum total of his sensations, desires and thoughts; whilst his surroundings, on the other hand, exert only a mediate or indirect influence upon him. This is why the same external events or circumstances affect no two people alike; even with perfectly similar surroundings everyone lives in a world of his own. For a man has immediate apprehension only of his own ideas, feelings and volitions; the outer world can influence him only in so far as it brings these to life. The world in which a man lives shapes itself chiefly by the way in which he looks at it, and so it proves different to different men; to one it is barren, dull, and superficial; to another rich, interesting, and full of meaning. On hearing of the interesting events which have happened in the course of a man's experience, many people will wish that similar things had happened in their lives, too, completely forgetting that they should be envious rather of the mental aptitude which lent those events the significance they possess when he describes them; to a man of genius they were interesting adventures; but to the dull perceptions of an ordinary individual they would have been stale, everyday occurrences. This is in the highest degree the case with many of Goethe's and Byron's poems, which are obviously founded upon actual facts; where it is open to a foolish reader to envy the poet because so many delightful things happened to him, instead of envying that mighty power of phantasy which was capable of turning a fairly common experience into something so great and beautiful.

In the same way, a person of melancholy temperament will make a scene in a tragedy out of what appears to the sanguine man only in the light of an interesting conflict, and to a phlegmatic soul as something without any meaning;—all of which rests upon the fact that every event, in order to be realized and appreciated, requires the co-operation of two factors, namely, a subject and an object; although these are as closely and necessarily connected as oxygen and hydrogen in water. When therefore the objective or external factor in an experience is actually the same, but the subjective or personal appreciation of it varies, the event is just as much a different one in the eyes of different persons as if the objective factors had not been alike; for to a blunt intelligence the fairest and best object in the world presents only a poor reality, and is therefore only poorly appreciated,—like a fine landscape in dull weather, or in the reflection of a bad *camera obscura*. In plain language, every man is pent up within the limits of his own consciousness, and cannot directly get beyond those limits any more than he can get beyond his own skin; so external aid is not of much use to him. On the stage, one man is a prince, another a minister, a third a servant or a soldier or a general, and so on,—mere external differences: the inner reality, the kernel of all these appearances is the same—a poor player, with all the anxieties of his lot. In life it is

just the same. Differences of rank and wealth give every man his part to play, but this by no means implies a difference of inward happiness and pleasure ; here, too, there is the same being in all—a poor mortal, with his hardships and troubles. Though these may, indeed, in every case proceed from dissimilar causes, they are in their essential nature much the same in all their forms, with degrees of intensity which vary, no doubt, but in no wise correspond to the part a man has to play, to the presence or absence of position and wealth. Since everything which exists or happens for a man exists only in his consciousness and happens for it alone, the most essential thing for a man is the constitution of this consciousness, which is in most cases far more important than the circumstances which go to form its contents. All the pride and pleasure of the world, mirrored in the dull consciousness of a fool, is poor indeed compared with the imagination of Cervantes writing his *Don Quixote* in a miserable prison. The objective half of life and reality is in the hand of fate, and accordingly takes various forms in different cases: the subjective half is ourself, and in essentials it always remains the same.

Hence the life of every man is stamped with the same character throughout, however much his external circumstances may alter ; it is like a series of variations on a single theme. No one can get beyond his own individuality. An animal, under whatever circumstances it is placed, remains within the narrow limits to which nature has irrevocably consigned it ; so that our endeavors to make a pet happy must always keep within the compass of its nature, and be restricted to what it can feel. So it is with man ; the measure of the happiness he can attain is determined beforehand by his individuality. More especially is this the case with the mental powers, which fix once for all his capacity for the higher kinds of pleasure. If these powers are small, no efforts from without, nothing that his fellow-men or that fortune can do for him, will suffice to raise him above the ordinary degree of human happiness and pleasure, half animal though it be ; his only resources are his sensual appetite,—a cosy and cheerful family life at the most,—low company and vulgar pastime ; even education, on the whole, can avail little, if anything, for the enlargement of his horizon. For the highest, most varied and lasting pleasures are those of the mind, however much our youth may deceive us on this point ; and the pleasures of the mind turn chiefly on the powers of the mind. It is clear, then, that our happiness depends in a great degree upon what we *are*, upon our individuality, whilst lot or destiny is generally taken to mean only what we *have*, or our *reputation*. Our lot, in this sense, may improve ; but we do not ask much of it if we are inwardly rich : on the other hand, a fool remains a fool, a dull block-head, to his last hour, even though he were surrounded by houris in paradise. This is why Goethe, in the *West-östlicher Diwan*, says that every man, whether he occupy a low position in life, or emerges as its victor, testifies to personality as the greatest factor in happiness :—

*Volk und Knecht und Ueberwinder
 Sie gestehen, zu jeder Zeit,
 Höchstes Glück der Erdenkinder
 Sei nur die Persönlichkeit.*

Everything confirms the fact that the subjective element in life is incomparably more important for our happiness and pleasure than the objective, from such sayings as *Hunger is the best sauce*, and *Youth and Age cannot live together*, up to the life of the Genius and the Saint. Health outweighs all other blessings so much that one may really say that a healthy beggar is happier than an ailing king. A quiet and cheerful temperament, happy in the enjoyment of a perfectly sound physique, an intellect clear, lively, penetrating and seeing things as they are, a moderate and gentle will, and therefore a good conscience—these are privileges which no rank or wealth can make up for or replace. For what a man is in himself, what accompanies him when he is alone, what no one can give or take away, is obviously more essential to him than everything he has in the way of possessions, or even what he may be in the eyes of the world. An intellectual man in complete solitude has excellent entertainment in his own thoughts and fancies, whilst no amount of diversity of social pleasures, theatres, excursions and amusements, can ward off boredom from a dullard. A good, temperate, gentle character can be happy in needy circumstances, whilst a covetous, envious and malicious man, even if he be the richest in the world, goes miserable. Nay more; to one who has the constant delight of a special individuality, with a high degree of intellect, most of the pleasures which are run after by mankind are perfectly superfluous; they are even a trouble and a burden. And so Horace says of himself, that, however many are deprived of the fancy-goods of life, there is one at least who can live without them :—

*Gemmas, marmor, ebur, Tyrrhena sigilla, tabellas,
 Argentum, vestes Gætulo murice tinctas
 Sunt qui non habeant, est qui non curat habere ;*

and when Socrates saw various articles of luxury spread out for sale, he exclaimed : *How much there is in the world that I do not want.*

So the first and most essential element in our life's happiness is what we are,—our personality, if for no other reason than that it is a constant factor coming into play under all circumstances: besides, unlike the blessings which are described under the two heads, it is not the sport of destiny and cannot be wrested from us;—and, so far, it is endowed with an absolute value in contrast to the merely relative worth of the other two. The consequence of this is that it is much more difficult than people commonly suppose to get a hold on a man from without. But here the all-powerful agent, Time, comes in and claims its rights, and before its influence physical and mental advantages gradually waste away. Moral

character alone remains inaccessible to it. In view of the destructive effect of time, it seems, indeed, as if the blessings named under the other two heads, of which time cannot directly rob us, were superior to those of the first. Another advantage might be claimed for them, namely, that being in their very nature objective and external, they are attainable, and every one is presented with the possibility, at least, of coming into possession of them ; whilst what is subjective is not open to us to acquire, but, making its entry by a kind of *divine right*, it remains for life, immutable, inalienable, an inexorable doom. Let me quote those lines in which Goethe describes how an unalterable destiny is assigned to every man at the hour of his birth, so that he can develop only in the lines laid down for him, as it were, by the conjunctions of the stars ; and how the Sibyl and the prophets declare that *himself* a man can never escape, nor any power of time avail to change the path on which his life is cast :—

*Wie an dem Tag, der dich der Welt verliehen,
Die Sonne stand zum Grusse der Planeten,
Bist alsobald und fort und fort gediehen,
Nach dem Gesetz, wonach du angetreten.
So mußt du sein, dir kannst du nicht entziehen,
So sagten schon Sibyllen und Propheten ;
Und keine Zeit und keine Macht zerstückelt
Geprägte Form, die lebend sich entwickelt.*

The only thing that stands in our power to achieve, is to make the most advantageous use possible of the personal qualities we possess, and accordingly to follow such pursuits only as will call them into play, to strive after the kind of perfection of which they admit and to avoid every other ; consequently, to choose the position, occupation and manner of life which are most suitable for their development.

Imagine a man endowed with herculean strength who is compelled by circumstances to follow a sedentary occupation, some minute exquisite work of the hands, for example, or to engage in study and mental labor demanding quite other powers, and just those which he has not got,—compelled, that is, to leave unused the powers in which he is pre-eminently strong ; a man placed like this will never feel happy all his life through. Even more miserable will be the lot of the man with intellectual powers of a very high order, who has to leave them undeveloped and unemployed, in the pursuit of a calling which does not require them, some bodily labor, perhaps, for which his strength is insufficient. Still, in a case of this kind, it should be our care, especially in youth, to avoid the precipice of presumption, and not ascribe to ourselves a superfluity of power which is not there.

Since the blessings described under the first head decidedly outweigh those contained under the other two, it is manifestly a wiser course to aim at the maintenance of our health and the cultivation of our faculties, than at the amassing of wealth ; but this must not be mistaken as mean-

ing that we should neglect to acquire an adequate supply of the necessities of life. Wealth, in the strict sense of the word, that is, great superfluity, can do little for our happiness; and many rich people feel unhappy just because they are without any true mental culture or knowledge, and consequently have no objective interests which would qualify them for intellectual occupations. For, beyond the satisfaction of some real and natural necessities, all that the possession of wealth can achieve has a very small influence upon our happiness, in the proper sense of the word; indeed, wealth rather disturbs it, because the preservation of property entails a great many unavoidable anxieties. And still men are a thousand times more intent on becoming rich than on acquiring culture, though it is quite certain that what a man *is* contributes much more to his happiness than what he *has*. So you may see many a man, as industrious as an ant, ceaselessly occupied from morning to night in the endeavor to increase his heap of gold. Beyond the narrow horizon of means to this end, he knows nothing; his mind is a blank, and consequently unsusceptible to any other influence. The highest pleasures, those of the intellect, are to him inaccessible, and he tries in vain to replace them by the fleeting pleasures of sense in which he indulges, lasting but a brief hour and at tremendous cost. And if he is lucky, his struggles result in his having a really great pile of gold, which he leaves to his heir, either to make it still larger, or to squander it in extravagance. A life like this, though pursued with a sense of earnestness and an air of importance, is just as silly as many another which has a fool's cap for its symbol.

What a man has in himself is, then, the chief element in his happiness. Because this is, as a rule, so very little, most of those who are placed beyond the struggle with penury, feel at bottom quite as unhappy as those who are still engaged in it. Their minds are vacant, their imagination dull, their spirits poor, and so they are driven to the company of those like them—for *similis simili gaudet*—where they make common pursuit of pastime and entertainment, consisting for the most part in sensual pleasure, amusement of every kind, and finally, in excess and libertinism. A young man of rich family enters upon life with a large patrimony, and often runs through it in an incredibly short space of time, in vicious extravagance; and why? Simply because, here too, the mind is empty and void, and so the man is bored with existence. He was sent forth into the world outwardly rich but inwardly poor, and his vain endeavor was to make his external wealth compensate for his inner poverty, by trying to obtain everything *from without*, like an old man who seeks to strengthen himself as King David or Maréchal de Retz tried to do. And so in the end one who is inwardly poor comes to be also poor outwardly.

I need not insist upon the importance of the other two kinds of blessings which make up the happiness of human life; now-a-days the value

of possessing them is too well known to require advertisement. The third class, it is true, may seem, compared with the second, of a very ethereal character, as it consists only of other people's opinions. Still, everyone has to strive for reputation, that is to say, a good name. Rank, on the other hand, should be aspired to only by those who serve the State, and fame by very few indeed. In any case, reputation is looked upon as a priceless treasure, and fame as the most precious of all the blessings a man can attain,—the Golden Fleece, as it were, of the elect : whilst only fools will prefer rank to property. The second and third classes, moreover, are reciprocally cause and effect ; so far that is, as Petronius' maxim, *habes habebis*, is true ; and conversely, the favor of others, in all its forms, often puts us in the way of getting what we want.

CHAPTER II.

PERSONALITY, OR WHAT A MAN IS.

WE have already seen, in general, that what a man *is* contributes much more to his happiness than what he *has*, or how he is regarded by others. What a man is, and so what he has in his own person, is always the chief thing to consider; for his individuality accompanies him always and everywhere, and gives its color to all his experiences. In every kind of enjoyment, for instance, the pleasure depends principally upon the man himself. Every one admits this in regard to physical, and how much truer it is of intellectual, pleasure. When we use that English expression, "to enjoy oneself," we are employing a very striking and appropriate phrase; for observe—one says, not "he enjoys Paris," but, "he enjoys himself in Paris." To a man possessed of an ill-conditioned individuality, all pleasure is like delicate wine in a mouth made bitter with gall. Therefore, in the blessings as well as in the ills of life, less depends upon what befalls us than upon the way in which it is met, that is, upon the kind and degree of our general susceptibility. What a man is and has in himself,—in a word, personality, with all it entails, is the only immediate and direct factor in his happiness and welfare. All else is mediate and indirect, and its influence can be neutralized and frustrated; but the influence of personality never. This is why the envy which personal qualities excite is the most implacable of all,—as it is also the most carefully dissembled.

Further, the constitution of our consciousness is the ever present and lasting element in all we do or suffer; our individuality is persistently at work, more or less, at every moment of our life: all other influences are temporal, incidental, fleeting, and subject to every kind of chance and change. This is why Aristotle says: *It is not wealth but character that lasts.*¹ And just for the same reason we can more easily bear a misfortune which comes to us entirely from without, than one which we have drawn upon ourselves; for fortune may always change, but not character. Therefore, subjective blessings,—a noble nature, a capable head, a joyful temperament, bright spirits, a well-constituted, perfectly sound physique, in a word, *mens sana in corpore sano*, are the first and most important elements in happiness; so that we should be more intent on promoting and

¹ Eth. Eud. viii. 2. 37 :—

ἡ γὰρ φύσις βέβαιον, οὐ τὰ χρήματα.

preserving such qualities than on the possession of external wealth and external honor.

And of all these, the one which makes us the most directly happy is a genial flow of good spirits ; for this excellent quality is its own immediate reward. The man who is cheerful and merry has always a good reason for being so,—the fact, namely, that he is so. There is nothing which, like this quality, can so completely replace the loss of every other blessing. If you know anyone who is young, handsome, rich and esteemed, and you want to know, further, if he is happy, ask, Is he cheerful and genial?—and if he is, what does it matter whether he is young or old, straight or humpbacked, poor or rich?—he is happy. In my early days I once opened an old book and found these words : *If you laugh a great deal you are happy ; if you cry a great deal, you are unhappy* ;—a very simple remark, no doubt ; but just because it so simple I have never been able to forget it, even though it is in the last degree a truism. So, if cheerfulness knocks at our door, we should throw it wide open, for it never comes inopportunistly ; instead of that, we often make scruples about letting it in. We want to be quite sure that we have every reason to be contented ; then we are afraid that cheerfulness of spirits may interfere with serious reflections or weighty cares. Cheerfulness is a direct and immediate gain,—the very coin, as it were, of happiness, and not, like all else, merely a cheque upon the bank ; for it alone makes us immediately happy in the present moment, and that is the highest blessing for beings like us, whose existence is but an infinitesimal moment between two eternities. To secure and promote this feeling of cheerfulness should be the supreme aim of all our endeavors after happiness.

Now it is certain that nothing contributes so little to cheerfulness as riches, or so much, as health. Is it not in the lower classes, the so-called working classes, more especially those of them who live in the country, that we see cheerful and contented faces ? and is it not amongst the rich, the upper classes, that we find faces full of ill-humor and vexation ? Consequently we should try as much as possible to maintain a high degree of health ; for cheerfulness is the very flower of it. I need hardly say what one must do to be healthy—avoid every kind of excess, all violent and unpleasant emotion, all mental overstrain, take daily exercise in the open air, cold baths and such like hygienic measures. For without a proper amount of daily exercise no one can remain healthy ; all the processes of life demand exercise for the due performance of their functions, exercise not only of the parts more immediately concerned, but also of the whole body. For, as Aristotle rightly says, *Life is movement* ; it is its very essence. Ceaseless and rapid motion goes on in every part of the organism. The heart, with its complicated double systole and diastole, beats strongly and untiringly ; with twenty-eight beats it has to drive the whole of the blood through arteries, veins and capillaries ; the

lungs pump like a steam-engine, without intermission ; the intestines are always in peristaltic action ; the glands are all constantly absorbing and secreting ; even the brain has a double motion of its own, with every beat of the pulse and every breath we draw. When people can get no exercise at all, as is the case with the countless numbers who are condemned to a sedentary life, there is a glaring and fatal disproportion between outward inactivity and inner tumult. For this ceaseless internal motion requires some external counterpart, and the want of it produces effects like those of emotion which we are obliged to suppress. Even trees must be shaken by the wind, if they are to thrive. The rule which finds its application here may be most briefly expressed in Latin : *omnis motus, quo celerior, eo magis motus*.

How much our happiness depends upon our spirits, and these again upon our state of health, may be seen by comparing the influence which the same external circumstances or events have upon us when we are well and strong with the effect which they have when we are depressed and troubled with ill-health. It is not what things are objectively and in themselves, but what they are for us, in our way of looking at them, that makes us happy or the reverse. As Epictetus says, *Men are not influenced by things but by their thoughts about things*. And in general, nine-tenths of our happiness depends upon health alone. With health, everything is a source of pleasure ; without it, nothing else, whatever it may be, is enjoyable ; even the other personal blessings,—a great mind, a happy temperament—are degraded and dwarfed for want of it. So it is really with good reason that, when two people meet, the first thing they do is to inquire after each other's health, and to express the hope that it is good ; for good health is by far the most important element in human happiness. It follows from all this that the greatest of follies is to sacrifice health for any other kind of happiness, whatever it may be, for gain, advancement, learning or fame, let alone, then for fleeting sensual pleasures. Everything else should rather be postponed to it.

But however much health may contribute to that flow of good spirits which is so essential to our happiness, good spirits do not entirely depend upon health ; for a man may be perfectly sound in his physique and still possess a melancholy temperament and be generally given up to sad thoughts. The ultimate cause of this is undoubtedly to be found in innate, and therefore unalterable, physical constitution, especially in the more or less normal relation of a man's sensitiveness to his muscular and vital energy. Abnormal sensitiveness produces inequality of spirits, a predominating melancholy, with periodical fits of unrestrained liveliness. A genius is one whose nervous power or sensitiveness is largely in excess ; as Aristotle¹ has very correctly observed, *Men distinguished in philosophy, politics, poetry or art, appear to be all of a melancholy temperament*. This is doubtless the passage which Cicero has in his mind when he says, as he often

¹Probl. xxx, ep. 1.

does, *Aristoteles ait omnes ingeniosos melancholicos esse.*¹ Shakespeare has very neatly expressed this radical and innate diversity of temperament in those lines in *The Merchant of Venice* :

*Nature has framed strange fellows in her time ;
Some that will evermore peep through their eyes,
And laugh, like parrots at a bag-piper ;
And others of such vinegar aspect,
That they'll not show their teeth in way of smile,
Though Nestor swear the jest be laughable.*

This is the difference which Plato draws between *εύκολος* and *δύσκολος*—the man of *easy*, and the man of *difficult* disposition—in proof of which he refers to the varying degrees of susceptibility which different people show to pleasurable and painful impressions ; so that one man will laugh at what makes another despair. As a rule, the stronger the susceptibility to unpleasant impressions, the weaker is the susceptibility to pleasant ones, and *vice versa*. If it is equally possible for an event to turn out well or ill, the *δύσκολος* will be annoyed or grieved if the issue is unfavorable, and will not rejoice, should it be happy. On the other hand, the *εύκολος* will neither worry nor fret over an unfavorable issue, but rejoice if it turns out well. If the one is successful in nine out of ten undertakings, he will not be pleased, but rather annoyed that one has miscarried ; whilst the other, if only a single one succeeds, will manage to find consolation in the fact and remain cheerful. But here is another instance of the truth, that hardly any evil is entirely without its compensation ; for the misfortunes and sufferings which the *δύσκολοι*, that is, people of gloomy and anxious character, have to overcome, are, on the whole, more imaginary and therefore less real than those which befall the gay and careless ; for a man who paints everything black, who constantly fears the worst and takes measures accordingly, will not be disappointed so often in this world, as one who always looks upon the bright side of things. And when a morbid affection of the nerves, or a derangement of the digestive organs, plays into the hand of an innate tendency to gloom, this tendency may reach such a height that permanent discomfort produces a weariness of life. So arises an inclination to suicide, which even the most trivial unpleasantness may actually bring about ; nay, when the tendency attains its worst form, it may be occasioned by nothing in particular, but a man may resolve to put an end to his existence, simply because he is permanently unhappy, and then coolly and firmly carry out his determination ; as may be seen by the way in which the sufferer, when placed under supervision, as he usually is, eagerly waits to seize the first unguarded moment, when, without a shudder, without a struggle or recoil, he may use the now natural and welcome means of effecting his release.* Even the healthiest, perhaps even

¹Tusc. i., 33.

* For a detailed description of this condition of mind cf. Esquirol *Des maladies mentales*.

the most cheerful man, may resolve upon death under certain circumstances ; when, for instance, his sufferings, or his fears of some inevitable misfortune, reach such a pitch as to outweigh the terrors of death. The only difference lies in the degree of suffering necessary to bring about the fatal act, a degree which will be high in the case of a cheerful, and low in that of a gloomy man. The greater the melancholy, the lower need the degree be ; in the end it may even sink to zero. But if a man is cheerful, and his spirits are supported by good health, it requires a high degree of suffering to make him lay hands upon himself. There are countless steps in the scale between the two extremes of suicide, the suicide which springs merely from a morbid intensification of innate gloom, and the suicide of the healthy and cheerful man, who has entirely objective grounds for putting an end to his existence.

Beauty is partly an affair of health. It may be reckoned as a personal advantage ; though it does not, properly speaking, contribute directly to our happiness. It does so indirectly, by impressing other people ; and it is no unimportant advantage, even in man. Beauty is an open letter of recommendation, predisposing the heart to favor the person who presents it. As is well said in those lines of Homer, the gift of beauty is not lightly to be thrown away, that glorious gift which none can bestow save the gods alone—

οὗτοι ἀπόβλητ' ἐστὶ θεῶν ἐρικυδέα δῶρα,
δόσα κεν αὐτοὶ δώσωιν, ἐκὼν δ' οὐκ ἄν τις ἔλοιτο.¹

The most general survey shows us that the two foes of human happiness are pain and boredom. We may go further, and say that in the degree in which we are fortunate enough to get away from the one, we approach the other. Life presents, in fact, a more or less violent oscillation between the two. The reason of this is that each of these two poles stands in a double antagonism to the other, external or objective, and inner or subjective. Needy surroundings and poverty produce pain ; while, if a man is more than well off, he is bored. Accordingly, while the lower classes are engaged in a ceaseless struggle with need, in other words, with pain, the upper carry on a constant and often desperate battle with boredom.² The inner or subjective antagonism arises from the fact that, in the individual, susceptibility to pain varies inversely with susceptibility to boredom, because susceptibility is directly proportionate to mental power. Let me explain. A dull mind is, as a rule associated with dull sensibilities, nerves which no stimulus can affect, a temperament, in short, which does not feel pain or anxiety very much, however great or terrible it may be. Now, intellectual dulness is at the bottom of

¹ *Iliad* 3, 65.

² And the extremes meet ; for the lowest state of civilization, a nomad or wandering life, finds its counterpart in the highest, where everyone is at times a tourist. The earlier stage was a case of necessity ; the latter is a remedy for boredom.

that *vacuity of soul* which is stamped on so many faces, a state of mind which betrays itself by a constant and lively attention to all the trivial circumstances in the external world. This is the true source of boredom—a continual panting after excitement, in order to have a pretext for giving the mind and spirits something to occupy them. The kind of things people choose for this purpose shows that they are not very particular, as witness the miserable pastimes they have recourse to, and their ideas of social pleasure and conversation: or again, the number of people who gossip on the doorstep or gape out of the window. It is mainly because of this inner vacuity of soul that people go in quest of society, diversion, amusement, luxury of every sort, which lead many to extravagance and misery. Nothing is so good a protection against such misery as inward wealth, the wealth of the mind, because the greater it grows, the less room it leaves for boredom. The inexhaustible activity of thought! finding ever new material to work upon in the multifarious phenomena of self and nature, and able and ready to form new combinations of them,—there you have something that invigorates the mind, and apart from moments of relaxation, sets it far above the reach of boredom.

But on the other hand, this high degree of intelligence is rooted in a high degree of susceptibility, greater strength of will, greater passionateness; and from the union of these qualities comes an increased capacity for emotion, an enhanced sensibility to all mental and even bodily pain, greater impatience of obstacles, greater resentment of interruption;—all of which tendencies are augmented by the power of the imagination, the vivid character of the whole range of thought, including what is disagreeable. This applies, in varying degrees, to every step in the long scale of mental power, from the veriest dunce to the greatest genius that ever lived. Therefore the nearer anyone is, either from a subjective or from an objective point of view, to one of these sources of suffering in human life, the farther he is from the other. And so a man's natural bend will lead him to make his objective world conform to his subjective as much as possible; that is to say, he will take the greatest measures against that form of suffering to which he is most liable. The wise man will, above all, strive after freedom from pain and annoyance, quiet and leisure, consequently a tranquil, modest life, with as few encounters as may be; and so, after a little experience of his so-called fellow-men, he will elect to live in retirement, or even, if he is a man of great intellect, in solitude. For the more a man has in himself, the less he will want from other people,—the less, indeed, other people can be to him. This is why a high degree of intellect tends to make a man unsocial. True, if *quality* of intellect could be made up for by *quantity*, it might be worth while to live even in the great world; but unfortunately, a hundred fools together will not make one wise man.

But the individual who stands at the other end of the scale is no sooner free from the pangs of need than he endeavors to get pastime and

society at any cost, taking up with the first person he meets, and avoiding nothing so much as himself. For in solitude, where everyone is thrown upon his own resources, what a man has in himself comes to light : the fool in fine raiment groans under the burden of his miserable personality, a burden which he can never throw off, whilst the man of talent peoples the waste places with his animating thoughts. Seneca declares that folly is its own burden,—*omnis stultitia laborat fastidio sui*,—a very true saying, with which may be compared the words of Jesus, the son of Sirach, *The life of a fool is worse than death*.¹ And, as a rule, it will be found that a man is sociable just in the degree in which he is intellectually poor and generally vulgar. For one's choice in this world does not go much beyond solitude on one side and vulgarity on the other. It is said that the most sociable of all people are the negroes ; and they are at the bottom of the scale in intellect. I remember reading once in a French paper² that the blacks in North America, whether free or enslaved, are fond of shutting themselves up in large numbers in the smallest space, because they cannot have too much of one another's snub-nosed company.

The brain may be regarded as a kind of parasite of the organism, a pensioner, as it were, who dwells with the body : and leisure, that is, the time one has for the free enjoyment of one's consciousness or individuality, is the fruit or produce of the rest of existence, which is in general only labor and effort. But what does most people's leisure yield ?—boredom and dulness ; except, of course, when it is occupied with sensual pleasure or folly. How little such leisure is worth may be seen in the way in which it is spent : and, as Ariosto observes, how miserable are the idle hours of ignorant men !—*ozio lungo d'uomini ignoranti*. Ordinary people think merely how they shall *spend* their time ; a man of any talent tries to *use* it. The reason why people of limited intellect are apt to be bored is that their intellect is absolutely nothing more than the means by which the motive power of the will is put into force : and whenever there is nothing particular to set the will in motion, it rests, and their intellect takes a holiday, because, equally with the will, it requires something external to bring it into play. The result is an awful stagnation of whatever power a man has—in a word, boredom. To counteract this miserable feeling, men run to trivialities which please for the moment they are taken up, hoping thus to engage the will in order to rouse it to action, and so set the intellect in motion ; for it is the latter which has to give effect to these motives of the will. Compared with real and natural motives, these are but as paper money to coin ; for their value is only arbitrary—card games and the like, which have been invented for this very purpose. And if there is nothing else to be done, a man will twirl his thumbs or beat the devil's tattoo ; or a cigar may be a welcome substitute for exercising his brains. Hence, in all countries the chief occu-

¹ Ecclesiasticus, xxii. 11.

² *Le Commerce*, Oct. 19th, 1837.

pation of society is card playing,¹ and it is the gauge of its value, and an outward sign that it is bankrupt in thought. Because people have no thoughts to deal in, they deal cards, and try and win one another's money. Idiots! But I do not wish to be unjust; so let me remark that it may certainly be said in defence of card playing that it is a preparation for the world and for business life, because one learns thereby how to make a clever use of fortuitous but unalterable circumstances (cards, in this case), and to get as much out of them as one can: and to do this a man must learn a little dissimulation, and how to put a good face upon a bad business. But on the other hand, it is exactly for this reason that card playing is so demoralizing, since the whole object of it is to employ every kind of trick and machination in order to win what belongs to another. And a habit of this sort, learnt at the card table, strikes root and pushes its way into practical life; and in the affairs of every day a man gradually comes to regard *meum* and *tuum* in much the same light as cards, and to consider that he may use to the utmost whatever advantages he possessed, so long as he does not come within the arm of the law. Examples of what I mean are of daily occurrence in mercantile life. Since, then, leisure is the flower, or rather the fruit, of existence, as it puts a man into possession of himself, those are happy indeed who possess something real in themselves. But what do you get from most people's leisure?—only a good-for-nothing fellow, who is terribly bored and a burden to himself. Let us therefore, rejoice, dear brethren, for *we are not children of the bondswoman, but of the free.*

Further, as no land is so well off as that which requires few imports, or none at all, so the happiest man is one who has enough in his own inner wealth, and requires little or nothing from outside for his maintenance, for imports are expensive things, reveal dependence, entail danger, occasion trouble, and when all is said and done, are a poor substitute for home produce. No man ought to expect much from others, or, in general, from the external world. What one human being can be to another is not a very great deal: in the end every one stands alone, and the important thing is *who* it is that stands alone. Here, then, is another application of the general truth which Goethe recognizes in *Dichtung und Wahrheit* (Bk. III.), that in everything a man has ultimately to appeal to himself; or, as Goldsmith puts it in *The Traveler* :

*Still to ourselves in every place consign'd
Our own felicity we make or find.*

Himself is the source of the best and most a man can be or achieve. The more this is so—the more a man finds his sources of pleasure in him-

¹ *Translator's Note.*—Card playing to this extent is now, no doubt, a thing of the past, at any rate amongst the nations of northern Europe. The present fashion is rather in favor of a dilettante interest in art or literature.

self—the happier he will be. Therefore, it is with great truth that Aristotle¹ says, *To be happy means to be self-sufficient*. For all other sources of happiness are in their nature most uncertain, precarious, fleeting, the sport of chance; and so even under the most favorable circumstances they can easily be exhausted; nay, this is unavoidable, because they are not always within reach. And in old age these sources of happiness must necessarily dry up:—love leaves us then, and wit, desire to travel, delight in horses, aptitude for social intercourse; friends and relations, too, are taken from us by death. Then more than ever, it depends upon what a man has in himself; for this will stick to him longest; and at any period of life it is the only genuine and lasting source of happiness. There is not much to be got anywhere in the world. It is filled with misery and pain; and if a man escapes these, boredom lies in wait for him at every corner. Nay more; it is evil which generally has the upper hand, and folly makes the most noise. Fate is cruel, and mankind pitiable. In such a world as this, a man who is rich in himself is like a bright, warm, happy room at Christmastide, while without are the frost and snow of a December night. Therefore, without doubt, the happiest destiny on earth is to have the rare gift of a rich individuality, and, more especially, to be possessed of a good endowment of intellect; this is the happiest destiny, though it may not be, after all, a very brilliant one. There was great wisdom in that remark which Queen Christina of Sweden made. in her nineteenth year, about Descartes, who had then lived for twenty years in the deepest solitude in Holland, and, apart from report, was known to her only by a single essay: *M. Descartes*, she said, *is the happiest of men, and his condition seems to me much to be envied*.² Of course, as was the case with Descartes, external circumstances must be favorable enough to allow a man to be master of his life and happiness; or as we read in *Ecclesiastes*,³—*Wisdom is good together with an inheritance, and profitable unto them that see the sun*. The man to whom nature and fate have granted the blessing of wisdom, will be most anxious and careful to keep open the fountains of happiness which he has in himself; and for this independence and leisure are necessary. To obtain them, he will be willing to moderate his desires and harbor his resources, all the more because he is not, like others, restricted to the external world for his pleasures. So he will not be misled by expectations of office, or money, or the favor and applause of his fellow-men, into surrendering himself in order to conform to low desires and vulgar tastes; nay, in such a case he will follow the advice that Horace gives in his epistle to Mæcenas.⁴ It is a great piece of folly to sacrifice the inner for the outer man, to give the whole or the greater part of one's quiet leisure and independence for

¹ Eth. Eud., vii. 2.² *Vie de Descartes*, par Baillet. Liv. vii., ch. 10.³ vii. 12.⁴ Lib. i. ep. 7.

*Nec somnum plebis laudo, satur altitium, nec
Otia divitiis Arabum liberrima muto.*

splendor, rank, pomp, titles and honor. This is what Goethe did. My good luck drew me quite in the other direction.

The truth which I am insisting upon here, the truth, namely, that the chief source of human happiness is internal, is confirmed by that most accurate observation of Aristotle in the *Nicomachean Ethics*,¹ that every pleasure presupposes some sort of activity, the application of some sort of power, without which it cannot exist. The doctrine of Aristotle's, that a man's happiness consists in the free exercise of his highest faculties, is also enunciated by Stobæus in his exposition of the Peripatetic philosophy²: *Happiness*, he says, *means vigorous and successful activity in all your undertakings*; and he explains that by *vigor* (*ἀρετή*) he means *mastery* in any thing, whatever it be. Now, the original purpose of those forces with which nature has endowed man is to enable him to struggle against the difficulties which beset him on all sides. But if this struggle comes to an end, his unemployed forces become a burden to him; and he has to set to work and play with them,—use them, I mean, for no purpose at all, beyond avoiding the other source of human suffering, boredom, to which he is at once exposed. It is the upper classes, people of wealth, who are the greatest victims of boredom. Lucretius long ago described their miserable state, and the truth of his description may be still recognized to-day, in the life of every great capital—where the rich man is seldom in his own halls, because it bores him to be there, and still he returns thither, because he is no better off outside;—or else he is away in post-haste to his house in the country, as if it were on fire; and he is no sooner arrived there, than he is bored again, and seeks to forget everything in sleep, or else hurries back to town once more.

*Exit saepe foras magnis ex adibus ille,
Esse domi quem pertaesum est, subitoque revertat;
Quippe foris nihilo melius qui sentiat esse.
Currit, agens mannos, ad villam precipitanter,
Auxilium tectis quasi ferre ardentibus instans:
Oscitat extemplo, tetigit quum limina villae;
Aut abit in somnum gravis, atque obliviam quaerit:
Aut etiam properans urbem petit atque revisit.*³

In their youth, such people must have had a superfluity of muscular and vital energy,—powers which, unlike those of the mind, cannot maintain their full degree of vigor very long; and in later years they either have no mental powers at all, or cannot develop any for want of employment which would bring them into play; so that they are in a wretched plight. *Will*, however, they still possess, for this is the only power that is inexhaustible; and they try to stimulate their will by passionate excitement, such as games of chance for high stakes—undoubtedly a most degrading form of vice. And one may say generally that if a man finds himself

¹ i. 7 and vii. 13, 14.

² Ecl. eth. ii., ch. 7.

³ III. 1073.

with nothing to do, he is sure to choose some amusement suited to the kind of power in which he excels,—bowls, it may be, or chess ; hunting or painting ; horse-racing or music ; cards, or poetry, heraldry, philosophy, or some other dilettante interest. We might classify these interests methodically, by reducing them to expressions of the three fundamental powers, the factors, that is to say, which go to make up the physiological constitution of man ; and further, by considering these powers by themselves, and apart from any of the definite aims which they may subserve, and simply as affording three sources of possible pleasure, out of which every man will choose what suits him, according as he excels in one direction or another.

First of all come the pleasures of *vital energy*, of food, drink, digestion, rest and sleep ; and there are parts of the world where it can be said that these are characteristic and national pleasures. Secondly, there are the pleasures of *muscular energy*, such as walking, running, wrestling, dancing, fencing, riding, and similar athletic pursuits, which sometimes take the form of sport, and sometimes of a military life and real warfare. Thirdly, there are the pleasures of *sensibility*, such as observation, thought, feeling, or a taste for poetry or culture, music, learning, reading, meditation, invention, philosophy and the like. As regards the value, relative worth and duration of each of these kinds of pleasure, a great deal might be said, which, however, I leave the reader to supply. But every one will see that the nobler the power which is brought into play, the greater will be the pleasure which it gives ; for pleasure always involves the use of one's own powers, and happiness consists in a frequent repetition of pleasure. No one will deny that in this respect the pleasures of sensibility occupy a higher place than either of the other two fundamental kinds ; which exist in an equal, nay, in a greater degree in brutes ; it is his preponderating amount of sensibility which distinguishes man from other animals. Now, our mental powers are forms of sensibility, and therefore a preponderating amount of it makes us capable of that kind of pleasure which has to do with mind, so-called intellectual pleasure ; and the more sensibility predominates, the greater the pleasure will be.¹

¹Nature exhibits a continual progress, starting from the mechanical and chemical activity of the inorganic world, proceeding to the vegetable, with its dull enjoyment of self, from that to the animal world, where intelligence and consciousness begin, at first very weak, and only after many intermediate stages attaining its last great development in man, whose intellect is Nature's crowning point, the goal of all her efforts, the most perfect and difficult of all her works. And even within the range of the human intellect, there are a great many observable differences of degree, and it is very seldom that intellect reaches its highest point, intelligence properly so-called, which in this narrow and strict sense of the word, is Nature's most consummate product, and so the rarest and most precious thing of which the world can boast. The highest product of Nature is the clearest degree of consciousness, in which the world mirrors itself more plainly and completely than anywhere else. A man endowed with this form of intelligence is in possession of what is noblest and best on earth ; and accordingly, he has a source of pleasure in com-

The normal, ordinary man takes a vivid interest in anything only in so far as it excites his will, that is to say, is a matter of personal interest to him. But constant excitement of the will is never an unmixed good, to say the least ; in other words, it involves pain. Card playing, that universal occupation of "good society" everywhere, is a device for providing this kind of excitement, and that, too, by means of interests so small as to produce slight and momentary, instead of real and permanent, pain. Card playing is, in fact, a mere tickling of the will. 1

On the other hand, a man of powerful intellect is capable of taking a vivid interest in things in the way of mere *knowledge*, with no admixture of *will* ; nay, such an interest is a necessity to him. It places him in a sphere where pain is an alien, a diviner air where the gods live serene :—

θεοὶ δὲ αὖ ζῶοντες.²

Look on these two pictures—the life of the masses, one long, dull record of struggle and effort entirely devoted to the petty interests of personal welfare, to misery in all its forms, a life beset by intolerable boredom as soon as ever those aims are satisfied and the man is thrown back upon himself, whence he can be roused again to some sort of movement only by the wild fire of passion. On the other side you have a man

parison with which all others are small. From his surroundings he asks nothing but leisure for the free enjoyment of what he has got, time, as it were, to polish his diamond. All other pleasures that are not of the intellect are of a lower kind ; for they are, one and all, movements of will—desires, hopes, fears and ambitions, no matter to what directed : they are always satisfied at the cost of pain, and in the case of ambition, generally with more or less of illusion. With intellectual pleasure, on the other hand, truth becomes clearer and clearer. In the realm of intelligence pain has no power. Knowledge is all in all. Further, intellectual pleasures are accessible entirely and only through the medium of the intelligence, and are limited by its capacity. *For all the wit there is in the world is useless to him who has none.* Still this advantage is accompanied by a substantial disadvantage ; for the whole of Nature shows that with the growth of intelligence comes increased capacity for pain, and it is only with the highest degree of intelligence that suffering reaches its supreme point.

¹ *Vulgarity* is, at bottom, the kind of consciousness in which the will completely predominates over the intellect, where the latter does nothing more than perform the service of its master, the will. Therefore, when the will makes no demands, supplies no motives, strong or weak, the intellect entirely loses its power, and the result is complete vacancy of mind. Now, *will without intellect* is the most vulgar and common thing in the world, possessed by every blockhead, who, in the gratification of his passions, shows the stuff of which he is made. This is the condition of mind called *vulgarity*, in which the only active elements are the organs of sense, and that small amount of intellect which is necessary for apprehending the data of sense. Accordingly, the vulgar man is constantly open to all sorts of impressions, and immediately perceives all the little trifling things that go on in his environment : the lightest whisper, the most trivial circumstance, is sufficient to rouse his attention ; he is just like an animal. Such a man's mental condition reveals itself in his face, in his whole exterior ; and hence that vulgar, repulsive appearance, which is all the more offensive, if, as is usually the case, his *will*—the only factor in his consciousness is a base, selfish and altogether a bad one.

² *Odyssey IV.*, 805.

endowed with a high degree of mental power, leading an existence rich in thought and full of life and meaning, occupied by worthy and interesting objects as soon as ever he is free to give himself to them, bearing in himself a source of the noblest pleasure. What external promptings he wants come from the works of nature, and from the contemplation of human affairs and the achievements of the great of all ages and countries, which are thoroughly appreciated by a man of this type alone, as being the only one who can quite understand and feel with them. And so it is for him alone that those great ones have really lived ; it is to him that they make their appeal : the rest are but casual hearers who only half understand either them or their followers. Of course, this characteristic of the intellectual man implies that he has one more need than the others, the need of reading, observing, studying, meditating, practising, the need, in short, of undisturbed leisure. For, as Voltaire has very rightly said, *there are no real pleasures without real needs* ; and the need of them is why to such a man pleasures are accessible which are denied to others.—the varied beauties of nature and art and literature. To heap these round people who do not want them and cannot appreciate them, is like expecting grey hairs to fall in love. A man who is privileged in this respect leads two lives, a personal and an intellectual, life ; and the latter gradually comes to be looked upon as the true one, and the former as merely a means to it. Other people make this shallow, empty and troubled existence an end in itself. To the life of the intellect such a man will give the preference over all his other occupations : by the constant growth of insight and knowledge, this intellectual life, like a slowly-forming work of art, will acquire a consistency, a permanent intensity, a unity which becomes ever more and more complete ; compared with which, a life devoted to the attainment of personal comfort, a life that may broaden indeed, but can never be deepened, makes but a poor show ; and yet, as I have said, people make this baser sort of existence an end in itself.

The ordinary life of every day, so far as it is not moved by passion, is tedious and insipid ; and if it is so moved, it soon becomes painful. Those alone are happy whom nature has favored with some superfluity of intellect, something beyond what is just necessary to carry out the behests of their will ; for it enables them to lead an intellectual life as well, a life unattended by pain and full of vivid interests. Mere leisure, that is to say, intellect unoccupied in the service of the will, is not of itself sufficient ; there must be a real superfluity of power, set free from the service of the will and devoted to that of the intellect ; for, as Seneca says, *otium sine litteris mors est et vivi hominis sepultura*—illiterate leisure is a form of death, a living tomb. Varying with the amount of the superfluity, there will be countless developments in this second life, the life of the mind ; it may be the mere collection and labeling of insects, birds, minerals, coins, or the highest achievements of poetry and

philosophy. The life of the mind is not only a protection against boredom, it also wards off the pernicious effects of boredom ; it keeps us from bad company, from the many dangers, misfortunes, losses and extravagances which the man who places his happiness entirely in the objective world is sure to encounter. My philosophy, for instance, has never brought me in a sixpence ; but it has spared me many an expense.

The ordinary man places his life's happiness in things external to him, in property, rank, wife and children, friends, society, and the like, so that when he loses them or finds them disappointing, the foundation of his happiness is destroyed. In other words, his centre of gravity is not in himself ; it is constantly changing its place, with every wish and whim. If he is a man of means, one day it will be his house in the country, another buying horses, or entertaining friends, or traveling,—a life, in short, of general luxury, the reason being that he seeks his pleasure in things outside him. Like one whose health and strength are gone, he tries to regain by the use of jellies and drugs, instead of by developing his own vital power, the true source of what he has lost. Before proceeding to the opposite, let us compare with this common type the man who comes midway between the two, endowed, it may be, not exactly with distinguished powers of mind, but with somewhat more than the ordinary amount of intellect. He will take a dilettante interest in art, or devote his attention to some branch of science—botany, for example, or physics, astronomy, history, and find a great deal of pleasure in such studies, and amuse himself with them when external sources of happiness are exhausted or fail to satisfy him any more. Of a man like this it may be said that his centre of gravity is partly in himself. But a dilettante interest in art is a very different thing from creative activity ; and an amateur pursuit of science is apt to be superficial and not to penetrate to the heart of the matter. A man cannot entirely identify himself with such pursuits, or have his whole existence so completely filled and permeated with them that he loses all interest in everything else. It is only the highest intellectual power, what we call *genius*, that attains to this degree of intensity, making all time and existence its theme, and striving to express its peculiar conception of the world, whether it contemplates life as the subject of poetry or of philosophy. Hence, undisturbed occupation with himself, his own thoughts and works, is a matter of urgent necessity to such a man ; solitude is welcome, leisure is the highest good, and everything else is unnecessary, nay, even burdensome.

This is the only type of man of whom it can be said that his centre of gravity is entirely in himself ; which explains why it is that people of this sort—and they are very rare—no matter how excellent their character may be, do not show that warm and unlimited interest in friends, family, and the community in general, of which others are so often capable ; for if they have only themselves they are not inconsolable for the loss of everything else. This gives an isolation to their character, which is all

the more effective since other people never really quite satisfy them, as being, on the whole, of a different nature : nay more, since this difference is constantly forcing itself upon their notice, they get accustomed to move about amongst mankind as alien beings, and in thinking of humanity in general, to say *they* instead of *we*.

So the conclusion we come to is that the man whom nature has endowed with intellectual wealth is the happiest ; so true it is that the subjective concerns us more than the objective ; for whatever the latter may be, it can work only indirectly, secondarily, and through the medium of the former—a truth finely expressed by Lucian :—

Πλοῦτος ὁ τῆς ψυχῆς πλοῦτος μόνος ἐστὶν ἀληθής
Τὰλλα δ' ἔχει ἅτην πλείονα τῶν κτεάνων¹

—the wealth of the soul is the only true wealth, for with all other riches comes a bane even greater than they. The man of inner wealth wants nothing from outside but the negative gift of undisturbed leisure, to develop and mature his intellectual faculties, that is, to enjoy his wealth ; in short, he wants permission to be himself, his whole life long, every day and every hour. If he is destined to impress the character of his mind upon a whole race, he has only one measure of happiness or unhappiness—to succeed or fail in perfecting his powers and completing his work. All else is of small consequence. Accordingly, the greatest minds of all ages have set the highest value upon undisturbed leisure, as worth exactly as much as the man himself. *Happiness appears to consist in leisure*, says Aristotle ;² and Diogenes Laertius reports that *Socrates praised leisure, as the fairest of all possessions*. So, in the *Nicomachean Ethics*, Aristotle concludes that a life devoted to philosophy is the happiest ; or, as he says in the *Politics*,³ *the free exercise of any power, whatever it may be, is happiness*. This, again, tallies with what Goethe says in *Wilhelm Meister*. *The man who is born with a talent which he is meant to use, finds his greatest happiness in using it*.

But to be in possession of undisturbed leisure, is far from being the common lot ; nay, it is something alien to human nature, for the ordinary man's destiny is to spend life in procuring what is necessary for the subsistence of himself and his family ; he is a son of struggle and need, not a free intelligence. So people as a rule soon get tired of undisturbed leisure, and it becomes burdensome if there are no fictitious and forced aims to occupy it, play, pastime and hobbies of every kind. For this very reason it is full of possible danger, and *difficilis in otio quies* is a true saying—it is difficult to keep quiet if you have nothing to do. On the other hand, a measure of intellect far surpassing the ordinary, is as unnatural as it is abnormal. But if it exists, and the man endowed with it is to be happy, he will want precisely that undisturbed leisure which the others find burdensome or pernicious ; for without it he is a Pegasus

¹ Epigrammata, 12,

² Eth. Nichom. x, 7,

³ iv II,

in harness, and consequently unhappy. If these two unnatural circumstances, external and internal, undisturbed leisure and great intellect, happen to coincide in the same person, it is a great piece of fortune ; and if fate is so far favorable, a man can lead the higher life, the life protected from the two opposite sources of human suffering, pain and boredom, from the painful struggle for existence, and the incapacity for enduring leisure (which is free existence itself)—evils which may be escaped only by being mutually neutralized.

But there is something to be said in opposition to this view. Great intellectual gifts mean an activity pre-eminently nervous in its character, and consequently a very high degree of susceptibility to pain in every form. Further, such gifts imply an intense temperament, larger and more vivid ideas, which, as the inseparable accompaniment of great intellectual power, entail on its possessor a corresponding intensity of the emotions, making them incomparably more violent than those to which the ordinary man is a prey. Now, there are more things in the world productive of pain than of pleasure. Again, a large endowment of intellect tends to estrange the man who has it from other people and their doings ; for the more a man has in himself, the less he will be able to find in them ; and the hundred things in which they take delight, he will think shallow and insipid. Here, then, perhaps, is another instance of that law of compensation which makes itself felt everywhere. How often one hears it said, and said, too, with some plausibility, that the narrow-minded man is at bottom the happiest, even though his fortune is unenviable. I shall make no attempt to forestall the reader's own judgment on this point ; more especially as Sophocles himself has given utterance to two diametrically opposite opinions:—

Πολλῷ τὸ φρονεῖν εὐδαιμονίας
πρωτου ὑπάρχει. ¹

he says in one place—wisdom is the greatest part of happiness ; and again, in another passage, he declares that the life of the thoughtless is the most pleasant of all—

Ἐν ταῖς φρονεῖν γὰρ μηδὲν ἡδίστος βίος. ²

The philosophers of the *Old Testament* find themselves in a like contradiction.

The life of a fool is worse than death ³

and—

*In much wisdom is much grief ;
and he that increaseth knowledge increaseth sorrow.* ⁴

I may remark, however, that a man who has no mental needs, because his intellect is of the narrow and normal amount, is, in the strict sense of the word, what is called a *philistine*—an expression at first peculiar to the

¹ *Antigone*, 1347-8.

² *Ajax*, 554.

³ *Ecclesiasticus*, xviii. 11.

⁴ *Ecclesiastes*, i. 18.

German language, a kind of slang term at the Universities, afterwards used, by analogy, in a higher sense, though still in its original meaning, as denoting one who is not a *Son of the Muses*. A philistine is and remains *ἄμουρος ἄνθρωπος*. I should prefer to take a higher point of view, and apply the term *philistine* to people who are always seriously occupied with realities which are no realities; but as such a definition would be a transcendental one, and therefore not generally intelligible, it would hardly be in place in the present treatise, which aims at being popular. The other definition can be more easily elucidated, indicating, as it does, satisfactorily enough, the essential nature of all those qualities which distinguish the philistine. He is defined to be a *man without mental needs*. From this it follows, firstly, *in relation to himself*, that he has *no intellectual pleasures*; for, as was remarked before, there are no real pleasures without real needs. The philistine's life is animated by no desire to gain knowledge and insight for their own sake, or to experience that true æsthetic pleasure which is so nearly akin to them. If pleasures of this kind are fashionable, and the philistine finds himself compelled to pay attention to them, he will force himself to do so, but he will take as little interest in them as possible. His only real pleasures are of a sensual kind, and he thinks that these indemnify him for the loss of the others. To him oysters and champagne are the height of existence; the aim of his life is to procure what will contribute to his bodily welfare, and he is indeed in a happy way if this causes him some trouble. If the luxuries of life are heaped upon him, he will inevitably be bored, and against boredom he has a great many fancied remedies, balls, theatres, parties, cards, gambling, horses, women, drinking, traveling and so on; all of which can not protect a man from being bored, for where there are no intellectual needs, no intellectual pleasures are possible. The peculiar characteristic of the philistine is a dull, dry kind of gravity, akin to that of animals. Nothing really pleases, or excites, or interests him, for sensual pleasure is quickly exhausted, and the society of philistines soon becomes burdensome, and one may even get tired of playing cards. True, the pleasures of vanity are left, pleasures which he enjoys in his own way, either by feeling himself superior in point of wealth, or rank, or influence and power to other people, who thereupon pay him honor; or, at any rate, by going about with those who have a superfluity of these blessings, sunning himself in the reflection of their splendor—what the English call a *snob*.

From the essential nature of the philistine it follows, secondly, *in regard to others*, that, as he possesses no intellectual, but only physical needs, he will seek the society of those who can satisfy the latter, but not the former. The last thing he will expect from his friends is the possession of any sort of intellectual capacity; nay, if he chances to meet with it, it will rouse his antipathy and even hatred; simply because in addition to an unpleasant sense of inferiority, he experiences, in his heart, a

dull kind of envy, which has to be carefully concealed even from himself. Nevertheless, it sometimes grows into a secret feeling of rancor. But for all that, it will never occur to him to make his own ideas of worth or value conform to the standard of such qualities; he will continue to give the preference to rank and riches, power and influence, which in his eyes seem to be the only genuine advantages in the world; and his wish will be to excel in them himself. All this is the consequence of his being a man *without intellectual needs*. The great affliction of all philistines is that they have no interest in *ideas*, and that, to escape being bored, they are in constant need of *realities*. Now realities are either unsatisfactory or dangerous; when they lose their interest, they become fatiguing. But the ideal world is illimitable and calm,

*something afar
From the sphere of our sorrow.*

NOTE—In these remarks on the personal qualities which go to make happiness, I have been mainly concerned with the physical and intellectual nature of man. For an account of the direct and immediate influence of *morality* upon happiness, let me refer to my prize essay on *The Foundation of Morals* (Sec. 22).

CHAPTER III.

PROPERTY, OR WHAT A MAN HAS.

EPICURUS divides the needs of mankind into three classes, and the division made by this great professor of happiness is a true and a fine one. First come natural and necessary needs, such as, when not satisfied, produce pain,—food and clothing, *victus et amictus*, needs which can easily be satisfied. Secondly, there are those needs which, though natural, are not necessary, such as the gratification of certain of the senses. I may add, however, that in the report given by Diogenes Laertius, Epicurus does not mention which of the senses he means; so that on this point my account of his doctrine is somewhat more definite and exact than the original. These are needs rather more difficult to satisfy. The third class consists of needs which are neither natural nor necessary, the need of luxury and prodigality, show and splendor, which never come to an end, and are very hard to satisfy.¹

It is difficult, if not impossible, to define the limits which reason should impose on the desire for wealth; for there is no absolute or definite amount of wealth which will satisfy a man. The amount is always relative, that is to say, just so much as will maintain the proportion between what he wants and what he gets; for to measure a man's happiness only by what he gets, and not also by what he expects to get, is as futile as to try and express a fraction which shall have a numerator but no denominator. A man never feels the loss of things which it never occurs to him to ask for; he is just as happy without them; whilst another, who may have a hundred times as much, feels miserable because he has not got the one thing which he wants. In fact, here too, every man has an horizon of his own, and he will expect just as much as he thinks it possible for him to get. If an object within his horizon looks as though he could confidently reckon on getting it, he is happy; but if difficulties come in the way, he is miserable. What lies beyond his horizons has no effect at all upon him. So it is that the vast possessions of the rich do not agitate the poor, and conversely, that a wealthy man is not consoled by all his wealth for the failure of his hopes. Riches, one

¹ Cf. Diogenes Laertius, Bk. x., ch. xxvii., pp. 127 and 149; also Cicero *de finibus*, i.,

may say, are like sea-water; the more you drink, the thirstier you become; and the same is true of fame. The loss of wealth and prosperity leaves a man, as soon as the first pangs of grief are over, in very much the same habitual temper as before; and the reason of this is, that as soon as fate diminishes the amount of his possessions, he himself immediately reduces the amount of his claims. But when misfortune comes upon us, to reduce the amount of our claims is just what is most painful; once that we have done so, the pain becomes less and less, and is felt no more; like an old wound which has healed. Conversely, when a piece of good fortune befalls us, our claims mount higher and higher, as there is nothing to regulate them; it is in this feeling of expansion that the delight of it lies. But it lasts no longer than the process itself, and when the expansion is complete, the delight ceases; we have become accustomed to the increase in our claims, and consequently indifferent to the amount of wealth which satisfies them. There is a passage in the *Odyssey*¹ illustrating this truth, of which I may quote the last two lines:

Τοῖος γὰρ νόος ἐστὶν ἐπιχθονίων ἀνθρώπων
Οἷον ἐφ' ἡμαρ ἄγει πατὴρ ἀνδρῶν τε θεῶν τε.

—the thoughts of man that dwells on the earth are as the day granted him by the father of gods and men. Discontent springs from a constant endeavor to increase the amount of our claims, when we are powerless to increase the amount which will satisfy them.

When we consider how full of needs the human race is, how its whole existence is based upon them, it is not a matter for surprise that *wealth* is held in more sincere esteem, nay in greater honor, than anything else in the world; nor ought we to wonder that gain is made the only goal of life, and everything that does not lead to it pushed aside or thrown overboard—philosophy, for instance, by those who profess it. People are often reproached for wishing for money above all things, and for loving it more than anything else; but it is natural and even inevitable for people to love that which, like an unwearied Proteus, is always ready to turn itself into whatever object their wandering wishes or manifold desires may for the moment fix upon. Everything else can satisfy only *one* wish, *one* need: food is good only if you are hungry; wine, if you are able to enjoy it; drugs, if you are sick; fur for the winter; love for youth, and so on. These are all only relatively good, ἀγαθὰ πρὸς τι. Money alone is absolutely good, because it is not only a concrete satisfaction of one need in particular; it is an abstract satisfaction of all.

If a man has an independent fortune, he should regard it as a bulwark against the many evils and misfortunes which he may encounter; he should not look upon it as giving him leave to get what pleasure he can out of the world, or as rendering it incumbent upon him to spend it in

¹ xviii., 130-7.

this way. People who are not born with a fortune, but end by making a large one through the exercise of whatever talents they possess, almost always come to think that their talents are their capital, and that the money they have gained is merely the interest upon it; they do not lay by a part of their earnings to form permanent capital, but spend their money much as they have earned it. Accordingly, they often fall into poverty; their earnings decrease, or come to an end altogether, either because their talent is exhausted by becoming antiquated,—as, for instance, very often happens in the case of fine art; or else it was valid only under a special conjunction of circumstances which has now passed away. There is nothing to prevent those who live on the common labor of their hands from treating their earnings in that way if they like; because their kind of skill is not likely to disappear, or, if it does, it can be replaced by that of their fellow-workmen; moreover, the kind of work they do is always in demand; so that what the proverb says is quite true, *a useful trade is a mine of gold*. But with artists and professionals of every kind the case is quite different, and that is the reason why they are well paid. They ought to build up a capital out of their earnings; but they recklessly look upon them as merely interest, and end in ruin. On the other hand, people who inherit money know, at least, how to distinguish between capital and interest, and most of them try to make their capital secure and not encroach upon it; nay, if they can, they put by at least an eighth of their interest in order to meet future contingencies. So most of them maintain their position. These few remarks about capital and interest are not applicable to commercial life, for merchants look upon money only as a means of further gain, just as a workman regards his tools; so, even if their capital has been entirely the result of their own efforts, they try to preserve and increase it by using it. Accordingly, wealth is nowhere so much at home as in the merchant class.

It will generally be found that those who know what it is to have been in need and destitution are very much less afraid of it, and consequently more inclined to extravagance, than those who know poverty only by hearsay. People who have been born and bred in good circumstances are as a rule much more careful about the future, more economical, in fact, than those who, by a piece of good luck, have suddenly passed from poverty to wealth. This looks as if poverty were not really such a very wretched thing as it appears from a distance. The true reason, however, is rather the fact that the man who has been born into a position of wealth comes to look upon it as something without which he could no more live than he could live without air; he guards it as he does his very life; and so he is generally a lover of order, prudent and economical. But the man who has been born in a poor position looks upon it as the natural one, and if by any chance he comes in for a fortune, he regards it as a superfluity, something to be enjoyed or wasted, because, if it comes to an

end, he can get on just as well as before, with one anxiety the less ; or, as Shakespeare says in Henry VI.,¹

. . . . the adage must be verified
That beggars mounted run their horse to death.

But it should be said that people of this kind have a firm and excessive trust, partly in fate, partly in the peculiar means which have already raised them out of need and poverty,—a trust not only of the head, but of the heart also ; and so they do not, like the man born rich, look upon the shallows of poverty as bottomless, but console themselves with the thought that once they have touched ground again, they can take another upward flight. It is this trait in human character which explains the fact that women who were poor before their marriage often make greater claims, and are more extravagant, than those who have brought their husbands a rich dowry ; because, as a rule, rich girls bring with them not only a fortune, but also more eagerness, nay more of the inherited instinct, to preserve it, than poor girls do. If anyone doubts the truth of this, and thinks that it is just the opposite, he will find authority for his view in Ariosto's first Satire ; but on the other hand, Dr. Johnson agrees with my opinion. *A woman of fortune, he says, being used to the handling of money, spends it judiciously; but a woman who gets the command of money for the first time upon her marriage, has such a gusto in spending it, that she throws it away with great profusion.*² And in any case let me advise anyone who marries a poor girl not to leave her the capital but only the interest, and to take especial care that she has not the management of the children's fortune.

I do not by any means think that I am touching upon a subject which is not worth my while to mention when I recommend people to be careful to preserve what they have earned or inherited. For to start life with just as much as will make one independent, that is, allow one to live comfortably without having to work—even if one has only just enough for oneself, not to speak of a family—is an advantage which cannot be over-estimated ; for it means exemption and immunity from that chronic disease of penury, which fastens on the life of man like a plague ; it is emancipation from that forced labor which is the natural lot of every mortal. Only under a favorable fate like this can a man be said to be born free, to be, in the proper sense of the word, *sui juris*, master of his own time and powers, and able to say every morning, *This day is my own*. And just for the same reason the difference between the man who has a hundred a year and the man who has a thousand, is infinitely smaller than the difference between the former and a man who has nothing at all. But inherited wealth reaches its utmost value when it falls to the individual endowed with mental powers of a high order, who is resolved to pursue a line of life not compatible with the making of money ; for he is then

¹ Part III., Act 1, Sc. 4.

² Boswell's Life of Johnson: ann: 1776, ætat: 67.

doubly endowed by fate and can live for his genius; and he will pay his debt to mankind a hundred times, by achieving what no other could achieve, by producing some work which contributes to the general good, and redounds to the honor of humanity at large. Another, again, may use his wealth to further philanthropic schemes, and make himself well-deserving of his fellow-men. But a man who does none of these things, who does not even try to do them, who never attempts to study thoroughly some one branch of knowledge so that he may at least do what he can towards promoting it—such a one, born as he is into riches, is a mere idle and thief of time, a contemptible fellow. He will not even be happy because, in his ease, exemption from need delivers him up to the other extreme of human suffering, boredom, which is such martyrdom to him, that he would have been better off if poverty had given him something to do. And as he is bored he is apt to be extravagant, and so lose the advantage of which he showed himself unworthy. Countless numbers of people find themselves in want, simply because, when they had money, they spent it only to get momentary relief from the feeling of boredom which oppressed them.

It is quite another matter if one's object is success in political life, where favor, friends and connections are all important, in order to mount by their aid step by step on the ladder of promotion, and perhaps gain the topmost rung. In this kind of life, it is much better to be cast on the world without a penny; and if the aspirant is not of noble family, but is a man of some talent, it will redound to his advantage to be an absolute pauper. For what every one most aims at in ordinary contact with his fellows is to prove them inferior to himself; and how much more is this the case in politics. Now, it is only an absolute pauper who has such a thorough conviction of his own complete, profound and positive inferiority from every point of view, of his own utter insignificance and worthlessness, that he can take his place quietly in the political machine.¹ He is the only one who can keep on bowing low enough, and even go right down upon his face if necessary; he alone can submit to everything and laugh at it; he alone knows the entire worthlessness of merit; he alone uses his loudest voice and his boldest type whenever he has to speak or write of those who are placed over his head, or occupy any position of influence; and if they do a little scribbling, he is ready to applaud it as a master-work. He alone understands how to beg, and so betimes, when he is hardly out of his boyhood, he becomes a high priest of that hidden mystery which Goethe brings to light;—

¹ Translator's Note.—Schopenhauer is probably here making one of his many virulent attacks upon Hegel; in this case on account of what he thought to be the philosopher's abject servility to the government of his day. Though the Hegelian system has been the fruitful mother of many liberal ideas, there can be no doubt that Hegel's influence, in his own life-time, was an effective support of Prussian bureaucracy.

*Ueber's Niederträchtige
Niemand sich beklage :
Denn es ist das Mächtige
Was man dir auch sage :*

—it is no use to complain of low aims ; for, whatever people may say, they rule the world.

On the other hand, the man who is born with enough to live upon is generally of a somewhat independent turn of mind ; he is accustomed to keep his head up ; he has not learned all the arts of the beggar ; perhaps he even presumes a little upon the possession of talents which, as he ought to know, can never compete with cringing mediocrity ; in the long run he comes to recognize the inferiority of those who are placed over his head, and when they try to put insults upon him, he becomes refractory and shy. This is not the way to get on in the world. Nay, such a man may at last incline to the opinion freely expressed by Voltaire : *We have only two days to live ; it is not worth our while to spend them in cringing to contemptible rascals.* But alas ! let me observe by the way, that *contemptible rascal* is an attribute which may be predicated of an abominable number of people. What Juvenal says—it is difficult to rise if your poverty is greater than your talent—

*Haud facile emergunt quorum virtutibus obstat
Res angusta domi—*

is more applicable to a career of art and literature than to political and social ambition.

Wife and children I have not reckoned amongst a man's possessions : he is rather in their possession. It would be easier to include friends under that head ; but a man's friends belong to him not a whit more than he belongs to them.

CHAPTER IV.

POSITION, OR A MAN'S PLACE IN THE ESTIMATION OF OTHERS.

Section 1.—Reputation.

BY a peculiar weakness of human nature, people generally think too much about the opinion which others form of them ; although the slightest reflection will show that this opinion, whatever it may be, is not in itself essential to happiness. Therefore it is hard to understand why everybody feels so very pleased when he sees that other people have a good opinion of him, or say anything flattering to his vanity. If you stroke a cat, it will purr ; and, as inevitably, if you praise a man, a sweet expression of delight will appear on his face ; and even though the praise is a palpable lie, it will be welcome, if the matter is one on which he prides himself. If only other people will applaud him, a man may console himself for downright misfortune, or for the pittance he gets from the two sources of human happiness already discussed : and conversely, it is astonishing how infallibly a man will be annoyed, and in some cases deeply pained, by any wrong done to his feeling of self-importance, whatever be the nature, degree, or circumstances of the injury, or by any depreciation, slight, or disregard.

If the feeling of honor rests upon this peculiarity of human nature, it may have a very salutary effect upon the welfare of a great many people, as a substitute for morality ; but upon their happiness, more especially upon that peace of mind and independence which are so essential to happiness, its effect will be disturbing and prejudicial rather than salutary. Therefore it is advisable, from our point of view, to set limits to this weakness, and duly to consider and rightly to estimate the relative value of advantages, and thus temper, as far as possible, this great susceptibility to other people's opinion, whether the opinion be one flattering to our vanity, or whether it causes us pain ; for in either case it is the same feeling which is touched. Otherwise, a man is the slave of what other people are pleased to think,—and how little it requires to disconcert or soothe the mind that is greedy of praise :—

*Sic leve, sic parvum est, animum quod laudis avarum
Subruit ac reficit.*¹

¹ Horace, Epist : II, 1, 180.

Therefore it will very much conduce to our happiness if we duly compare the value of what a man is in and for himself with what he is in the eyes of others. Under the former comes everything that fills up the span of our existence and makes it what it is, in short, all the advantages already considered and summed up under the heads of personality and property; and the sphere in which all this takes place is the man's own consciousness. On the other hand, the sphere of what we are for other people is their consciousness, not ours; it is the kind of figure we make in their eyes, together with the thoughts which this arouses.¹ But this is something which has no direct and immediate existence for us, but can affect us only mediately and indirectly, so far, that is, as other people's behavior towards us is directed by it; and even then it ought to affect us only in so far as it can move us to modify *what we are in and for ourselves*. Apart from this, what goes on in other people's consciousness is, as such, a matter of indifference to us: and in time we get really indifferent to it, when we come to see how superficial and futile are most people's thoughts, how narrow their ideas, how mean their sentiments, how perverse their opinions, and how much of error there is in most of them; when we learn by experience with what depreciation a man will speak of his fellow, when he is not obliged to fear him, or thinks that what he says will not come to his ears. And if ever we have had an opportunity of seeing how the greatest of men will meet with nothing but slight from half-a-dozen blockheads, we shall understand that to lay great value upon what other people say is to pay them too much honor.

At all events, a man is in a very bad way, who finds no source of happiness in the first two classes of blessings already treated of, but has to seek it in the third, in other words, not in what he is in himself, but in what he is in the opinion of others. For, after all, the foundation of our whole nature, and, therefore, of our happiness, is our physique, and the most essential factor in happiness is health, and, next in importance after health, the ability to maintain ourselves in independence and freedom from care. There can be no competition or compensation between these essential factors on the one side, and honor, pomp, rank and reputation on the other, however much value we may set upon the latter. No one would hesitate to sacrifice the latter for the former, if it were necessary. We should add very much to our happiness by a timely recognition of the simple truth that every man's chief and real existence is in his own skin, and not in other people's opinions; and, consequently, that the actual conditions of our personal life,—health, temperament, capacity, income, wife, children, friends, home, are a hundred times more important for our happiness than what other people are pleased to think of us: otherwise we shall be miserable. And if people insist that

¹ Let me remark that people in the highest positions in life, with all their brilliance, pomp, display, magnificence and general show, may well say:—Our happiness lies entirely outside us, for it exists only in the heads of others.

honor is dearer than life itself, what they really mean is that existence and well-being are as nothing compared with other people's opinions. Of course, this may be only an exaggerated way of stating the prosaic truth that reputation, that is, the opinion others have of us, is indispensable if we are to make any progress in the world ; but I shall come back to that presently. When we see that almost everything men devote their lives to attain, sparing no effort and encountering a thousand toils and dangers in the process, has, in the end, no further object than to raise themselves in the estimation of others ; when we see that not only offices, titles, decorations, but also wealth, nay, even knowledge¹ and art, are striven for only to obtain, as the ultimate goal of all effort, greater respect from one's fellow-men,—is not this a lamentable proof of the extent to which human folly can go ? To set much too high a value on other people's opinion is a common error everywhere ; an error, it may be, rooted in human nature itself, or the result of civilization and social arrangements generally ; but, whatever its source, it exercises a very immoderate influence on all we do, and is very prejudicial to our happiness. We can trace it from a timorous and slavish regard for what other people will say, up to the feeling which made Virginius plunge the dagger into his daughter's heart, or induces many a man to sacrifice quiet, riches, health and even life itself, for posthumous glory. Undoubtedly this feeling is a very convenient instrument in the hands of those who have the control or direction of their fellow-men ; and accordingly we find that in every scheme for training up humanity in the way it should go, the maintenance and strengthening of the feeling of honor occupies an important place. But it is quite a different matter in its effect on human happiness, of which it is here our object to treat ; and we should rather be careful to dissuade people from setting too much store by what others think of them. Daily experience shows us, however, that this is just the mistake people persist in making ; most men set the utmost value precisely on what other people think, and are more concerned about it than about what goes on in their own consciousness, which is the thing most immediately and directly present to them. They reverse the natural order,—regarding the opinions of others as real existence and their own consciousness as something shadowy ; making the derivative and secondary into the principal, and considering the picture they present to the world of more importance than their own selves. By thus trying to get a direct and immediate result out of what has no really direct or immediate existence, they fall into the kind of folly which is called *vanity*—the appropriate term for that which has no solid or intrinsic value. Like a miser, such people forget the end in their eagerness to obtain the means.

The truth is that the value we set upon the opinion of others, and

¹ *Scire tuum nihil est nisi te scire hoc sciat alter*, (Persius i. 27)—knowledge is no use unless others know that you have it.

our constant endeavor in respect of it, are each quite out of proportion to any result we may reasonably hope to attain ; so that this attention to other people's attitude may be regarded as a kind of universal mania which anyone inherits. In all we do, almost the first thing we think about is, what will people say; and nearly half the troubles and bothers of life may be traced to our anxiety on this score; it is the anxiety which is at the bottom of all that feeling of self-importance, which is so often mortified because it is so very morbidly sensitive. It is solicitude about what others will say that underlies all our vanity and pretension, yes, and all our show and swagger too. Without it, there would not be a tenth part of the luxury which exists. Pride in every form, *point d'honneur* and *punctilio*, however varied their kind or sphere, are at bottom nothing but this—anxiety about what others will say—and what sacrifices it often costs ! One can see it even in a child ; and though it exists at every period of life, it is strongest in age ; because when the capacity for sensual pleasure fails, vanity and pride have only avarice to share their dominion. Frenchmen, perhaps, afford the best example of this feeling, and amongst them it is a regular epidemic, appearing sometimes in the most absurd ambition, or in a ridiculous kind of national vanity and the most shameless boasting. However, they frustrate their own aims, for other people make fun of them and call them *la grande nation*.

By way of specially illustrating this perverse and exuberant respect for other people's opinion, let me take a passage from the *Times* of March 31st, 1846, giving a detailed account of the execution of one Thomas Wix, an apprentice who, from motives of vengeance, had murdered his master. Here we have very unusual circumstances and an extraordinary character, though one very suitable for our purpose ; and these combine to give a striking picture of this folly, which is so deeply rooted in human nature, and allow us to form an accurate notion of the extent to which it will go. On the morning of the execution, says the report, *the rev. ordinary was early in attendance upon him, but Wix, beyond a quiet demeanor, betrayed no interest in his ministrations, appearing to feel anxious only to acquit himself "bravely" before the spectators of his ignominious end.* . . . *In the procession Wix fell into his proper place with alacrity, and, as he entered the Chapel-yard, remarked, sufficiently loud to be heard by several persons near him "Now, then, as Dr. Dodd said, I shall soon know the grand secret." On reaching the scaffold, the miserable wretch mounted the drop without the slightest assistance, and when he got to the centre, he bowed to the spectators twice, a proceeding which called forth a tremendous cheer from the degraded crowd beneath.*

This is an admirable example of the way in which a man, with death in the most dreadful form before his very eyes, and eternity beyond it, will care for nothing but the impression he makes upon a crowd of gapers, and the opinion he leaves behind him in their heads. There was much the same kind of thing in the case of Lecomte, who was executed

at Frankfurt, also in 1846, for an attempt on the king's life. At the trial he was very much annoyed that he was not allowed to appear, in decent attire, before the Upper House ; and on the day of the execution it was a special grief to him that he was not permitted to shave. It is not only in recent times that this kind of thing has been known to happen. Mateo Aleman tells us, in the Introduction to his celebrated romance, *Guzman de Alfarache*, that many infatuated criminals, instead of devoting their last hours to the welfare of their souls, as they ought to have done, neglect this duty for the purpose of preparing and committing to memory a speech to be made from the scaffold.

I take these extreme cases as being the best illustrations of what I mean ; for they give us a magnified reflection of our own nature. The anxieties of all of us, our worries, vexations, bothers, troubles, uneasy apprehensions, and strenuous efforts are due, in perhaps the large majority of instances, to what other people will say ; and we are just as foolish in this respect as those miserable criminals. Envy and hatred are very often traceable to a similar source.

Now, it is obvious that happiness, which consists for the most part in peace of mind and contentment, would be served by nothing so much as by reducing this impulse of human nature within reasonable limits,—which would perhaps make it one fiftieth part of what it is now. By doing so, we should get rid of a thorn in the flesh which is always causing us pain. But it is a very difficult task, because the impulse in question is a natural and innate perversity of human nature. Tacitus says, *The lust of fame is the last that a wise man shakes off.*¹ The only way of putting an end to this universal folly is to see clearly that it is a folly ; and this may be done by recognizing the fact that most of the opinions in men's heads are apt to be false, perverse, erroneous and absurd, and so in themselves unworthy of any attention ; further, that other people's opinions can have very little real and positive influence upon us in most of the circumstances and affairs of life. Again, this opinion is generally of such an unfavorable character that it would worry a man to death to hear everything that was said of him, or the tone in which he was spoken of. And finally, among other things, we should be clear about the fact that honor itself has no really direct, but only an indirect, value. If people were generally converted from this universal folly, the result would be such an addition to our peace of mind and cheerfulness as at present seems inconceivable ; people would present a firmer and more confident front to the world, and generally behave with less embarrassment and restraint. It is observable that a retired mode of life has an exceedingly beneficial influence on our peace of mind, and this is mainly because we thus escape having to live constantly in the sight of others, and pay everlasting regard to their casual opinions ; in a word, we are able to return upon ourselves. At the same time a good deal of positive misfortune

¹ Hist., iv., 6.

might be avoided, which we are now drawn into by striving after shadows, or, to speak more correctly, by indulging a mischievous piece of folly ; and we should consequently have more attention to give to solid realities and enjoy them with less interruption than at present. But *χαλεπὰ τὰ καλὰ*—what is worth doing is hard to do.

Section 2.—Pride.

The folly of our nature which we are discussing puts forth three shoots, ambition, vanity and pride. The difference between the last two is this : *pride* is an established conviction of one's own paramount worth in some particular respect ; while *vanity* is the desire of rousing such a conviction in others, and it is generally accompanied by the secret hope of ultimately coming to the same conviction oneself. Pride works *from within* ; it is the direct appreciation of oneself. Vanity is the desire to arrive at this appreciation indirectly, *from without*. So we find that vain people are talkative, and proud, taciturn. But the vain person ought to be aware that the good opinion of others, which he strives for, may be obtained much more easily and certainly by persistent silence than by speech, even though he has very good things to say. Anyone who wishes to effect pride is not therefore a proud man ; but he will soon have to drop this, as every other, assumed character.

It is only a firm, unshakeable conviction of preeminent worth and special value which makes a man proud in the true sense of the word,—a conviction which may, no doubt, be a mistaken one, or rest on advantages which are of an adventitious and conventional character: still pride is not the less pride for all that, so long as it be present in real earnest. And since pride is thus rooted in conviction, it resembles every other form of knowledge in not being within our own arbitrament. Pride's worst foe,—I mean its greatest obstacle,—is vanity, which courts the applause of the world in order to gain the necessary foundation for a high opinion of one's own worth, whilst pride is based upon a pre-existing conviction of it.

It is quite true that pride is something which is generally found fault with, and cried down ; but usually, I imagine, by those who have nothing upon which they can pride themselves. In view of the impudence and foolhardiness of most people, anyone who possesses any kind of superiority or merit will do well to keep his eyes fixed on it, if he does not want it to be entirely forgotten ; for if a man is good natured enough to ignore his own privileges, and hob-nob with the generality of other people, as if he were quite on their level, they will be sure to treat him, frankly and candidly, as one of themselves. This is a piece of advice I would specially offer to those whose superiority is of the highest kind—real superiority, I mean, of a purely personal nature—which cannot, like orders and titles, appeal to the eye or ear at every moment ; as, other-

wise, they will find that familiarity breeds contempt, or as the Romans used to say, *sus Minervam*. *Joke with a slave, and he'll soon show his heels*, is an excellent Arabian proverb; nor ought we to despise what Horace says,

*Sume superbiam
Quæsitam meritis.*

—usurp the fame you have deserved. No doubt, when modesty was made a virtue, it was a very advantageous thing for the fools; for everybody is expected to speak of himself as if he were one. This is leveling down indeed! for it comes to look as if there were nothing but fools in the world.

The cheapest sort of pride is national pride; for if a man is proud of his own nation, it argues that he has no qualities of his own of which he can be proud; otherwise, he would not have recourse to those which he shares with so many millions of his fellow-men. The man who is endowed with important personal qualities will be only too ready to see clearly in what respects his own nation falls short, since their failings will be constantly before his eyes. But every miserable fool who has nothing at all of which he can be proud adopts, as a last resource, pride in the nation to which he belongs; he is ready and glad to defend all its faults and follies tooth and nail, thus re-imbursing himself for his own inferiority. For example, if you speak of the stupid and degrading bigotry of the English nation with the contempt it deserves, you will hardly find one Englishman in fifty to agree with you; but if there should be one, he will generally happen to be an intelligent man.

The Germans have no national pride, which shows how honest they are, as everybody knows! and how dishonest are those who, by a piece ridiculous affectation, pretend that they are proud of their country—the *Deutsche Brüder* and the demagogues who flatter the mob in order to mislead it. I have heard it said that gunpowder was invented by a German. I doubt it. Lichtenberg asks, *Why is it that a man who is not a German does not care about pretending that he is one; and that if he makes any pretence at all, it is to be a Frenchman or an Englishman?*¹

However that may be, individuality is a far more important thing than nationality, and in any given man deserves a thousand-fold more consideration. And since you cannot speak of natural character without referring to large masses of people, it is impossible to be loud in your praises and at the same time honest. National character is only another name for the particular form which the littleness, perversity and baseness of mankind take in every country. If we become disgusted with one, we

¹ *Translator's Note.* It should be remembered that these remarks were written in the earlier part of the present century, and that a German philosopher nowadays, even though he were as apt to say bitter things as Schopenhauer, could hardly write in a similar strain.

praise another, until we get disgusted with this too. Every nation mocks at other nations, and all are right.

The contents of this chapter, which treats, as I have said, of what we represent in the world, or what we are in the eyes of others, may be further distributed under three heads : honor, rank and fame.

Section 3.—Rank.

Let us take rank first, as it may be dismissed in a few words, although it plays an important part in the eyes of the masses and of the philistines, and is a most useful wheel in the machinery of the State.

It has a purely conventional value. Strictly speaking, it is a sham ; its method is to exact an artificial respect, and, as a matter of fact, the whole thing is a mere farce.

Orders, it may be said, are bills of exchange drawn on public opinion, and the measure of their value is the credit of the drawer. Of course, as a substitute for pensions, they save the State a good deal of money ; and, besides, they serve a very useful purpose, if they are distributed with discrimination and judgment. For people in general have eyes and ears, it is true ; but not much else, very little judgment indeed, or even memory. There are many services to the State quite beyond the range of their understanding ; others, again, are appreciated and made much of for a time, and then soon forgotten. It seems to me, therefore, very proper, that a cross or a star should proclaim to the mass of people always and everywhere, *This man is not like you ; he has done something.* But orders lose their value when they are distributed unjustly, or without due selection, or in too great numbers : a prince should be as careful in conferring them as a man of business is in signing a bill. It is a pleonasm to inscribe on any order *for distinguished service* ; for every order ought to be for distinguished service. That stands to reason.

Section 4.—Honor.

Honor is a much larger question than rank, and more difficult to discuss. Let us begin by trying to define it.

If I were to say *Honor is external conscience, and conscience is inward honor*, no doubt a good many people would assent ; but there would be more show than reality about such a definition, and it would hardly go to the root of the matter. I prefer to say, *Honor is, on its objective side, other people's opinion of what we are worth ; on its subjective side, it is the respect we pay to this opinion.* From the latter point of view, to be a *man of honor* is to exercise what is often a very wholesome, but by no means a purely moral, influence.

The feelings of honor and shame exist in every man who is not utterly depraved, and honor is everywhere recognized as something particularly valuable. The reason of this is as follows: By and in himself a man can

accomplish very little ; he is like Robinson Crusoe on a desert island. It is only in society that a man's powers can be called into full activity. He very soon finds this out when his consciousness begins to develop, and there arises in him the desire to be looked upon as a useful member of society, as one, that is, who is capable of playing his part as a man—*pro parte virili*—thereby acquiring a right to the benefits of social life. Now, to be a useful member of society, one must do two things : firstly, what everyone is expected to do everywhere ; and, secondly, what one's own particular position in the world demands and requires.

But a man soon discovers that everything depends upon his being useful, not in his own opinion, but in the opinion of others ; and so he tries his best to make that favorable impression upon the world, to which he attaches such a high value. Hence, this primitive and innate characteristic of human nature, which is called the feeling of honor, or, under another aspect, the feeling of shame—*verecundia*. It is this which brings a blush to his cheek at the thought of having suddenly to fall in the estimation of others, even when he knows that he is innocent, nay, even if his remissness extends to no absolute obligation, but only to one which he has taken upon himself of his own free will. Conversely, nothing in life gives a man so much courage as the attainment or renewal of the conviction that other people regard him with favor ; because it means that everyone joins to give him help and protection, which is an infinitely stronger bulwark against the ills of life than anything he can do himself.

The variety of relations in which a man can stand to other people so as to obtain their confidence, that is, their good opinion, gives rise to a distinction between several kinds of honor, resting chiefly on the different bearings that *meum* may take to *tuum* ; or, again, on the performance of various pledges ; or finally, on the relation of the sexes. Hence, there are three main kinds of honor, each of which takes various forms—civic honor, official honor, and sexual honor.

Civic honor has the widest sphere of all. It consists in the assumption that we shall pay unconditional respect to the rights of others, and, therefore, never use any unjust or unlawful means of getting what we want. It is the condition of all peaceable intercourse between man and man ; and it is destroyed by anything that openly and manifestly militates against this peaceable intercourse, anything, accordingly, which entails punishment at the hands of the law, always supposing that the punishment is a just one.

The ultimate foundation of honor is the conviction that moral character is unalterable : a single bad action implies that future actions of the same kind will, under similar circumstances, also be bad. This is well expressed by the English use of the word *character* as meaning credit, reputation, honor. Hence honor, once lost, can never be recovered ; unless the loss rested on some mistake, such as may occur if a man is slandered or his actions viewed in a false light. So the law provides

remedies against slander, iibel, and even insult : for insult, though it amount to no more than mere abuse, is a kind of summary slander with a suppression of the reasons. What I mean may be well put in the Greek phrase—not quoted from any author—*εστιν ἡ λοιδορία διαβολῇ συντομός*. It is true that if a man abuses another, he is simply showing that he has no real or true causes of complaint against him ; as otherwise, he would bring these forward as the premises, and rely upon his hearers to draw the conclusion themselves : instead of which, he gives the conclusion and leaves out the premises, trusting that people will suppose that he has done so only for the sake of being brief.

Civic honor draws its existence and name from the middle classes ; but it applies equally to all, not excepting the highest. No man can disregard it, and it is a very serious thing, of which every one should be careful not to make light. The man who breaks confidence has forever forfeited confidence, whatever he may do, and whoever he may be ; and the bitter consequences of the loss of confidence can never be averted.

There is a sense in which honor may be said to have a *negative* character in opposition to the *positive* character of fame. For honor is not the opinion people have of particular qualities which a man may happen to possess exclusively : it is rather the opinion they have of the qualities which a man may be expected to exhibit, and to which he should not prove false. Honor, therefore, means that a man is not exceptional ; fame, that he is. Fame is something which must be won ; honor, only something which must not be lost. The absence of fame is obscurity, which is only a negative ; but loss of honor is shame, which is a positive quality. This negative character of honor must not be confused with anything *passive* ; for honor is above all things active in its working. It is the only quality which preceeds *directly* from the man who exhibits it : it is concerned entirely with what he does and leaves undone, and has nothing to do with the actions of others or the obstacles they place in his way. It is something entirely in our own power—*τῶν ἐφ' ἡμῶν*. This distinction, as we shall see presently, marks off true honor from the sham honor of chivalry.

Slander is the only weapon by which honor can be attacked from without ; and the only way to repel the attack is to confute the slander with the proper amount of publicity, and a due unmasking of him who utters it.

The reason why respect is paid to age is that old people have necessarily shown in the course of their lives whether or not they have been able to maintain their honor unblemished ; while that of young people has not yet been put to the proof, though they are credited with the possession of it. For neither length of years,—equaled, as it is, and even excelled, in the case of some of the lower animals,—nor, again, experience, which is only a closer knowledge of the world's ways, can be any sufficient reason for the respect which the young are everywhere required

to show towards the old : for if it were merely a matter of years, the weakness which attends on age would call rather for consideration than for respect. It is, however, a remarkable fact that white hair always commands reverence—a reverence really innate and instinctive. Wrinkles—a much surer sign of old age—command no reverence at all : you never hear any one speak of *venerable wrinkles* ; but *venerable white hair* is a common expression.

Honor has only an indirect value. For, as I explained at the beginning of this chapter, what other people think of us, if it effects us at all, can effect us only in so far as it governs their behavior towards us, and only just so long as we live with, or have to do with, them. But it is to society alone that we owe that safety which we and our possessions enjoy in a state of civilization ; in all we do we need the help of others, and they, in their turn, must have confidence in us before they can have anything to do with us. Accordingly, their opinion of us is, indirectly, a matter of great importance ; though I cannot see how it can have a direct or immediate value. This is an opinion also held by Cicero. *I quite agree*, he writes, *with what Chrysippus and Diogenes used to say, that a good reputation is not worth raising a finger to obtain, if it were not that it is so useful.*¹ This truth has been insisted upon at great length by Helvetius in his chief work *De l'Esprit*,² the conclusion of which is that *we love esteem not for its own sake, but solely for the advantages which it brings*. And as the means can never be more than the end, that saying, of which so much is made, *Honor is dearer than life itself*, is, as I have remarked, a very exaggerated statement. So much, then, for civic honor.

Official honor is the general opinion of other people that a man who fills any office really has the necessary qualities for the proper discharge of all the duties which appertain to it. The greater and more important the duties a man has to discharge in the State, and the higher and more influential the office which he fills, the stronger must be the opinion which people have of the moral and intellectual qualities which render him fit for his post. Therefore, the higher his position, the greater must be the degree of honor paid to him, expressed, as it is, in titles, orders and the generally subservient behavior of others towards him. As a rule, a man's official rank implies the particular degree of honor which ought to be paid to him, however much this degree may be modified by the capacity of the masses to form any notion of its importance. Still, as a matter of fact, greater honor is paid to a man who fulfils special duties than to the common citizen, whose honor mainly consists in keeping clear of dishonor.

Official honor demands, further, that the man who occupies an office must maintain respect for it, for the sake both of his colleagues and of those who will come after him. This respect an official can maintain by a proper observance of his duties, and by repelling any attack that may be

¹ *De finibus* iii., 17.

² *Disc.* : iii., 13.

made upon the office itself or upon its occupant : he must not, for instance, pass over unheeded any statement to the effect that the duties of the office are not properly discharged, or that the office itself does not conduce to the public welfare. He must prove the unwarrantable nature of such attacks by enforcing the legal penalty for them.

Subordinate to the honor of official personages comes that of those who serve the State in any other capacity, as doctors, lawyers, teachers, anyone, in short, who by graduating in any subject, or by any other public declaration that he is qualified to exercise some special skill, claims to practice it ; in a word, the honor of all those who take any public pledges whatever. Under this head comes military honor, in the true sense of the word, the opinion that people who have bound themselves to defend their country really possess the requisite qualities which will enable them to do so, especially courage, personal bravery and strength, and that they are perfectly ready to defend their country to the death, and never and under no circumstances desert the flag to which they have once sworn allegiance. I have here taken official honor in a wider sense than that in which it is generally used, namely, the respect due by citizens to an office itself.

In treating of *sexual honor* and the principals on which it rests, a little more attention and analysis are necessary ; and what I shall say will support my contention that all honor really rests upon a utilitarian basis. There are two natural divisions of the subject—tho honor of women and the honor of men, in either side issuing in a well-understood *esprit de corps*. The former is by far the more important of the two, because the most essential feature in woman's life is her relation to man.

Female honor is the general opinion in regard to a girl that she is pure, and in regard to a wife that she is faithful. The importance of this opinion rests upon the following considerations. Women depend upon men in all the relations of life ; men upon women, it might be said, in one only. So an arrangement is made for mutual interdependence—man undertaking responsibility for all woman's needs and also for the children that spring from their union—an arrangement on which is based the welfare of the whole female race. To carry out this plan, women have to band together with a show of *esprit de corps*, and present one undivided front to their common enemy, man,—who possesses all the good things of the earth, in virtue of his superior physical and intellectual power,—in order to lay siege to and conquer him, and so get possession of him and a share of those good things. To this end the honor of all women depends upon the enforcement of the rule that no woman should give herself to a man except in marriage, in order that every man may be forced, as it were, to surrender and ally himself with a woman ; by this arrangement provision is made for the whole of the female race. This is a result, however, which can be obtained only by a strict observance of the rule ; and, accordingly, women everywhere show true *esprit de corps* in carefully

insisting upon its maintenance. Any girl who commits a breach of the rule betrays the whole female race, because its welfare would be destroyed if every woman were to do likewise ; so she is cast out with shame as one who has lost her honor. No woman will have anything more to do with her ; she is avoided like the plague. The same doom is awarded to a woman who breaks the marriage tie ; for in so doing she is false to the terms upon which the man capitulated ; and as her conduct is such as to frighten other men from making a similar surrender, it imperils the welfare of all her sisters. Nay more ; this deception and coarse breach of troth is a crime punishable by the loss, not only of personal, but also of civic honor. This is why we minimize the shame of a girl, but not of a wife ; because, in the former case, marriage can restore honor, while in the latter, no atonement can be made for the breach of contract.

Once this *esprit de corps* is acknowledged to be the foundation of female honor, and is seen to be a wholesome, nay, a necessary arrangement, as at bottom a matter of prudence and interest, its extreme importance for the welfare of women will be recognized. But it does not possess anything more than a relative value. It is no absolute end, lying beyond all other aims of existence and valued above life itself. In this view, there will be nothing to applaud in the forced and extravagant conduct of a Lucretia or a Virginius—conduct which can easily degenerate into tragic farce, and produce a terrible feeling of revulsion. The conclusion of *Emilia Galotti*, for instance, makes one leave the theatre completely ill at ease ; and, on the other hand, all the rules of female honor cannot prevent a certain sympathy with Clara in *Egmont*. To carry this principle of female honor too far is to forget the end in thinking of the means—and this is just what people often do ; for such exaggeration suggests that the value of sexual honor is absolute ; while the truth is that it is more relative than any other kind. One might go so far as to say that its value is purely conventional, when one sees from Thomasius how in all ages and countries, up to the time of the Reformation, irregularities were permitted and recognized by law, with no derogation to female honor,—not to speak of the temple of Mylitta at Babylon.¹

There are also, of course, certain circumstances in civil life which make external forms of marriage impossible, especially in Catholic countries, where there is no such thing as divorce. Ruling princes everywhere, would, in my opinion, do much better, from a moral point of view, to dispense with forms altogether rather than contract a morganatic marriage, the descendants of which might raise claims to the throne if the legitimate stock happened to die out ; so that there is a possibility, though, perhaps, a remote one, that a morganatic marriage might produce a civil war. And, besides, such a marriage, concluded in defiance of all outward ceremony, is a concession made to women and priests—two classes of persons to whom one should be most careful to give as

¹ Herodotus, i. 199.

little tether as possible. It is further to be remarked that every man in a country can marry the woman of his choice, except one poor individual, namely, the prince. His hand belongs to his country, and can be given in marriage only for reasons of State, that is, for the good of the country. Still, for all that, he is a man; and, as a man, he likes to follow whither his heart leads. It is an unjust, ungrateful and priggish thing to forbid, or to desire to forbid, a prince from following his inclinations in this matter; of course, as long as the lady has no influence upon the Government of the country. From her point of view she occupies an exceptional position, and does not come under the ordinary rules of sexual honor; for she has merely given herself to a man who loves her, and whom she loves but cannot marry. And in general, the fact that the principle of female honor has no origin in nature, is shown by the many bloody sacrifices which have been offered to it,—the murder of children and the mother's suicide. No doubt a girl who contravenes the code commits a breach of faith against her whole sex; but this faith is one which is only secretly taken for granted, and not sworn to. And since, in most cases, her own prospects suffer most immediately, her folly is infinitely greater than her crime.

The corresponding virtue in men is a product of the one I have been discussing. It is their *esprit de corps*, which demands that, once a man has made that surrender of himself in marriage which is so advantageous to his conqueror, he shall take care that the terms of the treaty are maintained; both in order that the agreement itself may lose none of its force by the permission of any laxity in its observance, and that men, having given up everything, may, at least, be assured of their bargain, namely, exclusive possession. Accordingly, it is part of a man's honor to resent a breach of the marriage tie on the part of his wife, and to punish it, at the very least by separating from her. If he condones the offence, his fellow-men cry shame upon him; but the shame in this case is not nearly so foul as that of the woman who has lost her honor; the stain is by no means of so deep a dye—*levioris notae macula*;—because a man's relation to woman is subordinate to many other and more important affairs in his life. The two great dramatic poets of modern times have each taken man's honor as the theme of two plays; Shakespeare in *Othello* and *The Winter's Tale*, and Calderon in *El medico de su honra* (the Physician of his Honor), and *A secreto agravio secreta venganza* (for Secret Insult Secret Vengeance). It should be said, however, that honor demands the punishment of the wife only; to punish her paramour too, is a work of supererogation. This confirms the view I have taken, that a man's honor originates in *esprit de corps*.

The kind of honor which I have been discussing hitherto has always existed in its various forms and principles amongst all nations and at all times; although the history of female honor shows that its principles have undergone certain local modifications at different periods. But

there is another species of honor which differs from this entirely, a species of honor of which the Greeks and Romans had no conception, and up to this day it is perfectly unknown amongst Chinese, Hindoos or Mohammedans. It is a kind of honor which arose only in the Middle Age, and is indigenous only to Christian Europe, nay, only to an extremely small portion of the population, that is to say, the higher classes of society and those who ape them. It is *knightly honor*, or *point d'honneur*. Its principles are quite different from those which underlie the kind of honor I have been treating until now, and in some respects are even opposed to them. The sort I am referring to produces the *cavalier*; while the other kind creates the *man of honor*. As this is so, I shall proceed to give an explanation of its principles, as a kind of code or mirror of knightly courtesy.

(1.) To begin with, honor of this sort consists, not in other people's opinion of what we are worth, but wholly and entirely in whether they express it or not, no matter whether they really have any opinion at all, let alone whether they know of reasons for having one. Other people may entertain the worst opinion of us in consequence of what we do, and may despise us as much as they like; so long as no one dares to give expression to his opinion, our honor remains untarnished. So if our actions and qualities compel the highest respect from other people, and they have no option but to give this respect,—as soon as anyone, no matter how wicked or foolish he may be, utters something depreciatory of us, our honor is offended, nay, gone forever, unless we can manage to restore it. A superfluous proof of what I say, namely, that knightly honor depends, not upon what people think, but upon what they say, is furnished by the fact that insults can be withdrawn, or, if necessary, form the subject of an apology, which makes them as though they had never been uttered. Whether the opinion which underlay the expression has also been rectified, and why the expression should ever have been used, are questions which are perfectly unimportant: so long as the statement is withdrawn, all is well. The truth is that conduct of this kind aims, not at earning respect, but at extorting it.

(2.) In the second place, this sort of honor rests, not on what a man does, but on what he suffers, the obstacles he encounters; differing from the honor which prevails in all else, in consisting, not in what he says or does himself, but in what another man says or does. His honor is thus at the mercy of every man who can talk it away on the tip of his tongue; and if he attacks it, in a moment it is gone forever,—unless the man who is attacked manages to wrest it back again by a process which I shall mention presently, a process which involves danger to his life, health, freedom, property and peace of mind. A man's whole conduct may be in accordance with the most righteous and noble principles, his spirit may be the purest that ever breathed, his intellect of the very highest order; and yet his honor may disappear the moment that anyone is

pleased to insult him, anyone at all who has not offended against this code of honor himself, let him be the most worthless rascal or the most stupid beast, an idler, gambler, debtor, a man, in short, of no account at all. It is usually this sort of fellow who likes to insult people; for, as Seneca¹ rightly remarks, *ut quisque contemptissimus et ludibrio est, ita solutissimæ lingue est*—the more contemptible and ridiculous a man is, the readier he is with his tongue. His insults are most likely to be directed against the very kind of man I have described, because people of different tastes can never be friends, and the sight of pre-eminent merit is apt to raise the secret ire of a ne'er-do-well. What Goethe says in the *West-östlicher Divan* is quite true, that it is useless to complain against your enemies; for they can never become your friends, if your whole being is a standing reproach to them:—

*Was klagst du über Feinde?
Sollten Solche je werden Freunde
Denen das Wesen, wie du bist,
Im stillen ein ewiger Vorwurf ist?*

It is obvious that people of this worthless description have good cause to be thankful to the principle of honor, because it puts them on a level with people who in every other respect stand far above them. If a fellow likes to insult any one, attribute to him, for example, some bad quality, this is taken *prima facie* as a well-founded opinion, true in fact; a decree, as it were, with all the force of law; nay, if it is not at once wiped out in blood, it is a judgment which holds good and valid to all time. In other words, the man who is insulted remains—in the eyes of all *honorable people*—what the man who uttered the insult—even though he were the greatest wretch on earth—was pleased to call him; for he has *put up with* the insult—the technical term, I believe. Accordingly, all *honorable people* will have nothing more to do with him, and treat him like a leper, and, it may be, refuse to go into any company where he may be found, and so on.

This wise proceeding may, I think, be traced back to the fact that in the Middle Age, up to the fifteenth century, it was not the accuser in any criminal process who had to prove the guilt of the accused, but the accused who had to prove his innocence.² This he could do by swearing he was not guilty; and his backers—*consacramentales*—had to come and swear that in their opinion he was incapable of perjury. If he could find no one to help him in this way, or the accuser took objection to his backers, recourse was had to trial by *the Judgment of God*, which generally meant a duel. For the accused was now *in disgrace*,³ and had to clear

¹ *De Constantia*, II.

² See C. G. von Wächter's *Beiträge zur deutschen Geschichte*, especially the chapter on criminal law.

³ *Translator's Note.* It is true that this expression has another and special meaning in the technical terminology of Chivalry, but it is the nearest English equivalent which I can find for the German—*ein Bescholtener*.

himself. Here, then, is the origin of the notion of disgrace, and of that whole system which prevails nowadays amongst *honorable people*, —only that the oath is omitted. This is also the explanation of that deep feeling of indignation which *honorable people* are called upon to show if they are given the lie ; it is a reproach which they say must be wiped out in blood. It seldom comes to this pass, however, though lies are of common occurrence ; but in England, more than elsewhere, it is a superstition which has taken very deep root. As a matter of order, a man who threatens to kill another for telling a lie should never have told one himself. The fact is, that the criminal trial of the Middle Age also admitted of a shorter form. In reply to the charge, the accused answered : *That is a lie* ; whereupon it was left to be decided by *the Judgment of God*. Hence, the code of knightly honor prescribes that, when the lie is given, an appeal to arms follows as a matter of course. So much, then, for the theory of insult.

But there is something even worse than insult, something so dreadful that I must beg pardon of all *honorable people* for so much as mentioning it in this code of knightly honor ; for I know they will shiver, and their hair will stand on end, at the very thought of it—the *summum malum*, the greatest evil on earth, worse than death and damnation. A man may give another—*horribile dictu* !—a slap or a blow. This is such an awful thing, and so utterly fatal to all honor, that, while any other species of insult may be healed by blood-letting, this can be cured only by the *coup-de-grâce*.

(3.) In the third place, this kind of honor has absolutely nothing to do with what a man may be in and for himself ; or, again, with the question whether his moral character can ever become better or worse, and all such pedantic inquiries. If your honor happens to be attacked, or to all appearances gone, it can very soon be restored in its entirety if you are only quick enough in having recourse to the one universal remedy—a *duel*. But if the aggressor does not belong to the classes which recognize the code of knightly honor, or has himself once offended against it, there is a safer way of meeting any attack upon your honor, whether it consists in blows, or merely in words. If you are armed, you can strike down your opponent on the spot, or perhaps an hour later. This will restore your honor.

But if you wish to avoid such an extreme step, from fear of any unpleasant consequences arising therefrom, or from uncertainty as to whether the aggressor is subject to the laws of knightly honor or not, there is another means of making your position good, namely, the *Avantage*. This consists in returning rudeness with still greater rudeness ; and if insults are no use, you can try a blow, which forms a sort of climax in the redemption of your honor ; for instance, a box on the ear may be cured by a blow with a stick, and a blow with a stick by a thrashing with a horsewhip : and as the approved remedy for this last, some people

recommend you to spit at your opponent.¹ If all these means are of no avail, you must not shrink from drawing blood. And the reason for these methods of wiping out insult is, in this code, as follows :

(4.) To receive an insult is disgraceful ; to give one, honorable. Let me take an example. My opponent has truth, right and reason on his side. Very well. I insult him. Thereupon right and honor leave him and come to me, and, for the time being, he has lost them—until he gets them back, not by the exercise of right or reason, but by shooting and sticking me. Accordingly, rudeness is a quality which, in point of honor, is a substitute for any other and outweighs them all. The rudest is always right. What more do you want? However stupid, bad or wicked a man may have been, if he is only rude into the bargain, he condones and legitimizes all his faults. If in any discussion or conversation another man shows more knowledge, greater love of truth, a sounder judgment, better understanding than we, or generally exhibits intellectual qualities which cast ours into the shade, we can at once annul his superiority and our own shallowness, and in our turn be superior to him, by being insulting and offensive. For rudeness is better than any argument ; it totally eclipses intellect. If our opponent does not care for our mode of attack, and will not answer still more rudely, so as to plunge us into the ignoble rivalry of the *Avantage*, we are the victors and honor is on our side. Truth, knowledge, understanding, intellect, wit, must beat a retreat and leave the field to this almighty insolence.

Honorable people immediately make a show of mounting their war-horse, if anyone utters an opinion adverse to theirs, or shows more intelligence than they can muster ; and if in any controversy they are at a loss for a reply, they look about for some weapon of rudeness, which will serve as well and come readier to hand ; so they retire masters of the position. It must now be obvious that people are quite right in applauding this principle of honor as having ennobled the tone of society. This principle springs from another, which forms the heart and soul of the entire code.

(5.) Fifthly, the code implies that the highest court to which a man can appeal in any differences he may have with another on a point of honor is the court of physical force, that is of brutality. Every piece of rudeness is, strictly speaking, an appeal to brutality ; for it is a declaration that intellectual strength and moral insight are incompetent to decide, and that the battle must be fought out by physical force—a struggle which, in the case of man, whom Franklin defines as a *tool-making animal*, is decided by the weapons peculiar to the species ; and the decision is irrevocable. This is the well-known principle of *the right of might*—irony,

¹ *Translator's Note.* It must be remembered that Schopenhauer is here describing, or perhaps caricaturing, the manners and customs of the German aristocracy of half a century ago. Now, of course, *nous avons changé tout cela !*

of course, like *the wit of a fool*, a parallel phrase. The honor of a knight may be called the glory of might.

(6.) Lastly, if, as we saw above, civic honor is very scrupulous in the matter of *meum* and *uum*, paying great respect to obligations and a promise once made, the code we are here discussing displays, on the other hand, the noblest liberality. There is only one word which may not be broken, *the word of honor*—upon my *honor*, as people say—the presumption being, of course, that every other form of promise may be broken. Nay, if the worst comes to the worst, it is easy to break even one's word of honor, and still remain honorable—again by adopting that universal remedy, the duel, and fighting with those who maintain that we pledged our word. Further, there is one debt, and one alone, that under no circumstances must be left unpaid—a gambling debt, which has accordingly been called *a debt of honor*. In all other kinds of debt you may cheat Jews and Christians as much as you like; and your knightly honor remains without a stain.

The unprejudiced reader will see at once that such a strange, savage and ridiculous code of honor as this has no foundation in human nature, nor any warrant in a healthy view of human affairs. The extremely narrow sphere of its operation serves only to intensify the feeling, which is exclusively confined to Europe since the Middle Age, and then only to the upper classes, officers and soldiers, and people who imitate them. Neither Greeks nor Romans knew anything of this code of honor or of its principles; nor the highly civilized nations of Asia, ancient or modern. Amongst them no other kind of honor is recognized but that which I discussed first, in virtue of which a man is what he shows himself to be by his actions, not what any wagging tongue is pleased to say of him. They thought that what a man said or did might perhaps affect his own honor, but not any other man's. To them, a blow was but a blow—and any horse or donkey could give a harder one—a blow which under certain circumstances might make a man angry and demand immediate vengeance; but it had nothing to do with honor. No one kept account of blows or insulting words, or of the *satisfaction* which was demanded or omitted to be demanded. Yet in personal bravery and contempt of death, the ancients were certainly not inferior to the nations of Christian Europe. The Greeks and Romans were thorough heroes, if you like; but they knew nothing about *point d'honneur*. If they had any idea of a duel, it was totally unconnected with the life of the nobles; it was merely the exhibition of mercenary gladiators, slaves devoted to slaughter, condemned criminals, who, alternately with wild beasts, were set to butcher one another to make a Roman holiday. When Christianity was introduced, gladiatorial shows were done away with, and their place taken, in Christian times, by the duel, which was a way of settling difficulties by *the Judgment of God*. If the gladiatorial fight was a cruel sacrifice to the prevailing desire for great spectacles, dueling is a cruel sacrifice to

existing prejudices—a sacrifice, not of criminals, slaves and prisoners, but of the noble and the free.¹

There are a great many traits in the character of the ancients which show that they were entirely free from these prejudices. When, for instance, Marius was summoned to a duel by a Teutonic chief, he returned answer to the effect that, if the chief were tired of his life, he might go and hang himself; at the same time he offered him a veteran gladiator for a round or two. Plutarch relates in his life of Themistocles that Eurybiades, who was in command of the fleet, once raised his stick to strike him; whereupon Themistocles, instead of drawing his sword, simply said: *Strike, but hear me*. How sorry the reader must be, if he is an honorable man, to find that we have no information that the Athenian officers refused in a body to serve any longer under Themistocles, if he acted like that! There is a modern French writer who declares that if anyone considers Demosthenes a man of honor, his ignorance will excite a smile of pity; and that Cicero was not a man of honor either!² In a certain passage in Plato's *Laws*,³ the philosopher speaks at length of *αἰνία* or *assault*, showing us clearly enough that the ancients had no notion of any feeling of honor in connection with such matters. Socrates' frequent discussions were often followed by his being severely handled, and he bore it all mildly. Once, for instance, when somebody kicked him, the patience with which he took the insult surprised one of his friends. *Do you think*, said Socrates, *that if an ass happened to kick me, I should resent it?*⁴ On another occasion, when he was asked, *Has not that fellow abused and insulted you?* *No*, was his answer, *what he says is not addressed to me*.⁵ Stobæus has preserved a long passage from Musonius, from which we can see how the ancients treated insults. They knew no other form of satisfaction than that which the law provided, and wise people despised even this. If a Greek received a box on the ear, he could get satisfaction by the aid of the law; as is evident from Plato's *Gorgias*, where Socrates' opinion may be found. The same thing may be seen in the account given by Gellius of one Lucius Veratius, who had the audacity to give some Roman citizens whom he met on the road a box on the ear, without any provocation whatever; but to avoid any ulterior consequences, he told a slave to bring a bag of small money, and on the spot paid the trivial legal penalty to the men whom he had astonished by his conduct.

Crates, the celebrated Cynic philosopher, got such a box on the ear from Nicodromus, the musician, that his face swelled up and became black and blue; whereupon he put a label on his forehead, with the inscription, *Nicodromus fecit*, which brought much disgrace to the flute-

¹ *Translator's Note*. These and other remarks on dueling will no doubt wear a belated look to English readers; but they are hardly yet antiquated for most parts of the Continent.

² *Soirées littéraires*: par C. Durand. Rouen, 1828.

³ Bk. IX.

⁴ Diogenes Laertius, ii., 21.

⁵ *Ibid* 36.

player who had committed such a piece of brutality upon the man whom all Athens honored as a household god.¹ And in a letter to Melesippus, Diogenes of Sinope tells us that he got a beating from the drunken sons of the Athenians ; but he adds that it was a matter of no importance.² And Seneca devotes the last few chapters of his *De Constantia* to a lengthy discussion on insult—*contumelia* ; in order to show that a wise man will take no notice of it. In Chapter XIV. he says, *What shall a wise man do, if he is given a blow ? What Cato did, when some one struck him on the mouth ;—not fire up or avenge the insult, or even return the blow, but simply ignore it.*

Yes, you say, *but these men were philosophers.*—And you are fools, eh ? Precisely.

It is clear that the whole code of knightly honor was utterly unknown to the ancients ; for the simple reason that they always took a natural and unprejudiced view of human affairs, and did not allow themselves to be influenced by any such vicious and abominable folly. A blow in the face was to them a blow and nothing more, a trivial physical injury ; whereas the moderns make a catastrophe out of it, a theme for a tragedy ; as for instance, in the *Cid* of Corneille, or in a recent German comedy of middle-class life, called *The Power of Circumstance*, which should have been entitled *The Power of Prejudice*. If a member of the National Assembly at Paris got a blow on the ear, it would resound from one end of Europe to the other. The examples which I have given of the way in which such an occurrence would have been treated in classic times may not suit the ideas of *honorable people* ; so let me recommend to their notice, as a kind of antidote, the story of Monsieur Desglands in Diderot's masterpiece, *Jacques le fataliste*. It is an excellent specimen of modern knightly honor, which, no doubt, they will find enjoyable and edifying.³

From what I have said it must be quite evident that the principle of knightly honor has no essential and spontaneous origin in human nature. It is an artificial product, and its source is not hard to find. Its existence obviously dates from the time when people used their fists more than their

¹ Diogenes Laertius, vi. 87, and Apul : Flor : p. 126.

² Cf. Casaubon's Note, ad Diog. Laert., vi. 33.

³ *Translator's Note.* The story to which Schopenhauer here refers is briefly as follows : Two gentlemen, one of whom was named Desglands, were paying court to the same lady. As they sat at the table side by side, with the lady opposite, Desglands did his best to charm her with his conversation ; but she pretended not to hear him, and kept looking at his rival. In the agony of jealousy, Desglands, as he was holding a fresh egg in his hand, involuntarily crushed it ; the shell broke, and its contents bespattered his rival's face. Seeing him raise his hand, Desglands seized it and whispered : *Sir, I take it as given.* The next day Desglands appeared with a large piece of black sticking-plaster upon his right cheek. In the duel which followed, Desglands severely wounded his rival ; upon which he reduced the size of the plaster. When his rival recovered, they had another duel ; Desglands drew blood again, and again made his plaster a little smaller ; and so on for five or six times. After every duel Desglands' plaster grew less and less, until at last his rival was killed.

heads, when priestcraft had enchained the human intellect, the much bepraised Middle Age, with its system of chivalry. That was the time when people let the Almighty not only care for them but judge for them too ; when difficult cases were decided by an ordeal, a *Judgment of God* ; which, with few exceptions, meant a duel, not only where nobles were concerned, but in the case of ordinary citizens as well. There is a neat illustration of this in Shakespeare's Henry VI.¹ Every judicial sentence was subject to an appeal to arms—a court, as it were, of higher instance, namely, *the Judgment of God*: and this really meant that physical strength and activity, that is, our animal nature, usurped the place of reason on the judgment seat, deciding in matters of right and wrong, not by what a man had done, but by the force with which he was opposed, the same system, in fact, as prevails to-day under the principles of knightly honor. If any one doubts that such is really the origin of our modern duel, let him read an excellent work by J. B. Millingen, *The history of Dueling*.² Nay, you may still find amongst the supporters of the system,—who, by the way, are not usually the most educated or thoughtful of men,—some who look upon the result of a duel as really constituting a divine judgment in the matter in dispute ; no doubt in consequence of the traditional feeling on the subject.

But leaving aside the question of origin, it must now be clear to us that the main tendency of the principle is to use physical menace for the purpose of extorting an appearance of respect which is deemed too difficult or superfluous to acquire in reality ; a proceeding which comes to much the same thing as if you were to prove the warmth of your room by holding your hand on the thermometer and so make it rise. In fact, the kernel of the matter is this : whereas civic honor aims at peaceable intercourse, and consists in the opinion of other people that *we deserve full confidence*, because we pay unconditional respect to their rights ; knightly honor, on the other hand, lays down that *we are to be feared*, as being determined at all costs to maintain our own.

As not much reliance can be placed upon human integrity, the principle that it is more essential to arouse fear than to invite confidence would not, perhaps, be a false one, if we were living in a state of nature, where every man would have to protect himself and directly maintain his own rights. But in civilized life, where the State undertakes the protection of our person and property, the principle is no longer applicable : it stands, like the castles and watch-towers of the age when might was right, a useless and forlorn object, amidst well-tilled fields and frequented roads, or even railways.

Accordingly, the application of knightly honor, which still recognizes this principle, is confined to those small cases of personal assault which meet with but slight punishment at the hands of the law, or even none at all, for *de minimis nou*,—mere trivial wrongs, committed sometimes

¹ Part II., Act 2, Sc. 3.

² Published in 1849.

only in jest. The consequence of this limited application of the principle is that it has forced itself into an exaggerated respect for the value of the person,—a respect utterly alien to the nature, constitution or destiny of man—which it has elevated into a species of sanctity : and as it considers that the State has imposed a very insufficient penalty on the commission of such trivial injuries, it takes upon itself to punish them by attacking the aggressor in life or limb. The whole thing manifestly rests upon an excessive degree of arrogant pride, which, completely forgetting what man really is, claims that he shall be absolutely free from all attack or even censure. Those who determine to carry out this principle by main force, and announce, as their rule of action, *whoever insults or strikes me shall die!* ought for their pains to be banished the country.¹

As a palliative to this rash arrogance, people are in the habit of giving way on everything. If two intrepid persons meet, and neither will give way, the slightest difference may cause a shower of abuse, then fisticuffs, and, finally, a fatal blow : so that it would really be a more decorous proceeding to omit the intermediate steps and appeal to arms at once. An appeal to arms has its own special formalities ; and these have developed into a rigid and precise system of laws and regulations, together forming the most solemn farce there is,—a regular temple of honor dedicated to folly ! For if two intrepid persons dispute over some trivial matter (more important affairs are dealt with by law), one of them, the cleverer of the two, will of course yield ; and they will agree to differ. That this is so is proved by the fact that common people,—or, rather, the numerous classes of the community who do not acknowledge the principle of knightly honor, let any dispute run its natural course. Amongst these classes homicide is a hundredfold rarer than among those—and they amount, perhaps, in all, to hardly one in a thousand,—who pay homage to the principle : and even blows are of no very frequent occurrence.

Then it has been said that the manners and tone of good society are ultimately based upon this principle of honor, which, with its system of duels, is made out to be a bulwark against the assaults of savagery and

¹ Knightly honor is the child of pride and folly, and it is *need*, not pride, which is the heritage of the human race. It is a very remarkable fact that this extreme form of pride should be found exclusively amongst the adherents of the religion which teaches the deepest humility. Still, this pride must not be put down to religion, but rather, to the feudal system, which made every nobleman a petty sovereign who recognized no human judge, and learned to regard his person as sacred and inviolable, and any attack upon it, or any blow or insulting word, as an offence punishable by death. The principle of knightly honor and of the duel was at first confined to the nobles, and, later on, also to officers in the army, who, enjoying a kind of off-and-on relationship with the upper classes, though they were never incorporated with them, were anxious not to be behind them. It is true that duels were the product of the old ordeals ; but the latter are not the foundation, but rather the consequence and application of the principle of honor : the man who recognized no human judge appealed to the divine. Ordeals, however, are not peculiar to Christendom : they may be found in great force among the Hindoos, especially of ancient times ; and there are traces of them even now.

rudeness. But Athens, Corinth and Rome could assuredly boast of good, nay, excellent society, and manners and tone of a high order, without any support from the bogey of knightly honor. It is true that women did not occupy that prominent place in ancient society which they hold now, when conversation has taken on a frivolous and trifling character, to the exclusion of that weighty discourse which distinguished the ancients. This change has certainly contributed a great deal to bring about the tendency, which is observable in good society nowadays, to prefer personal courage to the possession of any other quality. The fact is that personal courage is really a very subordinate virtue,—merely the distinguishing mark of a subaltern,—a virtue, indeed, in which we are surpassed by the lower animals; or else you would not hear people say, *as brave as a lion*. Far from being the pillar of society, knightly honor affords a sure asylum, in general for dishonesty and wickedness, and also for small incivilities, want of consideration and unmannerliness. Rude behavior is often passed over in silence because no one cares to risk his neck in correcting it.

After what I have said, it will not appear strange that the dueling system is carried to the highest pitch of sanguinary zeal precisely in that nation whose political and financial records show that they are not too honorable. What that nation is like in its private and domestic life, is a question which may be best put to those who are experienced in the matter. Their urbanity and social culture have long been conspicuous by their absence.

There is no truth, then, in such pretexts. It can be urged with more justice that as, when you snarl at a dog, he snarls in return, and when you pet him, he fawns; so it lies in the nature of men to return hostility by hostility, and to be embittered and irritated at any signs of depreciatory treatment or hatred: and, as Cicero says, *there is something so penetrating in the shaft of envy that even men of wisdom and worth find its wound a painful one*; and nowhere in the world, except, perhaps, in a few religious sects, is an insult or a blow taken with equanimity. And yet a natural view of either would in no case demand anything more than a requital proportionate to the offence, and would never go the length of assigning *death* as the proper penalty for any one who accuses another of lying or stupidity or cowardice. The old German theory of *blood for a blow* is a revolting superstition of the age of chivalry. And in any case the return or requital of an insult is dictated by anger, and not by any such obligation of honor and duty as the advocates of chivalry seek to attach to it. The fact is that, the greater the truth, the greater the slander; and it is clear that the slightest hint of some real delinquency will give much greater offence than a most terrible accusation which is perfectly baseless: so that a man who is quite sure that he has done nothing to deserve a reproach may treat it with contempt, and will be safe in doing so. The theory of honor demands that he shall show a susceptibility

which he does not possess, and take bloody vengeance for insults which he cannot feel. A man must himself have but a poor opinion of his own worth who hastens to prevent the utterance of an unfavorable opinion by giving his enemy a black eye.

True appreciation of his own value will make a man really indifferent to insult; but if he cannot help resenting it, a little shrewdness and culture will enable him to save appearances and dissemble his anger. If we could only get rid of this superstition about honor—the idea, I mean, that it disappears when you are insulted, and can be restored by returning the insult; if we could only stop people from thinking that wrong, brutality and insolence can be legalized by expressing readiness to give satisfaction, that is, to fight in defence of it, we should all soon come to the general opinion that insult and depreciation are like a battle in which the loser wins; and that, as Vincenzo Monti says, abuse resembles a church-procession, because it always returns to the point from which it set out. If we could only get people to look upon insult in this light, we should no longer have to say something rude in order to prove that we are in the right. Now, unfortunately if we want to take a serious view of any question, we have first of all to consider whether it will not give offence in some way or other to the dullard, who generally shows alarm and resentment at the merest sign of intelligence: and it may easily happen that the head which contains the intelligent view has to be pitted against the noddle which is empty of everything but narrowness and stupidity. If all this were done away with, intellectual superiority could take the leading place in society which is its due—a place now occupied, though people do not like to confess it, by excellence of physique, mere fighting pluck, in fact: and the natural effect of such a change would be that the best kind of people would have one reason the less for withdrawing from society. This would pave the way for the introduction of real courtesy and genuinely good society, such as undoubtedly existed in Athens, Corinth and Rome. If anyone wants to see a good example of what I mean, I should like him to read Xenophon's *Banquet*.

The last argument in defence of knightly honor no doubt is, that, but for its existence, the world—awful thought!—would be a regular bear-garden. To which I may briefly reply that nine hundred and ninety-nine people out of a thousand who do not recognize the code, have often given and received a blow without any fatal consequences: whereas amongst the adherents of the code a blow usually means death to one of the parties. But let me examine this argument more closely.

I have often tried to find some tenable, or at any rate, plausible basis—other than a merely conventional one—some positive reasons, that is to say, for the rooted conviction which a portion of mankind entertains, that a blow is a very dreadful thing; but I have looked for it in vain, either in the animal or in the rational side of human nature. A blow is, and

always will be, a trivial physical injury which one man can do to another; proving, thereby, nothing more than his superiority in strength or skill, or that his enemy was off his guard. Analysis will carry us no further. The same knight who regards a blow from the human hand as the greatest of evils, if he gets a ten times harder blow from his horse, will give you the assurance, as he limps away in suppressed pain, that it is a matter of no consequence whatever. So I have come to think that it is the human hand which is at the bottom of the mischief. And yet in a battle the knight may get cuts and thrusts from the same hand and still assure you that his wounds are not worth mentioning. Now, I hear that a blow from the flat of a sword is not by any means so bad as a blow with a stick; and that, a short time ago, cadets were liable to be punished by the one but not the other, and that the very greatest honor of all is the *accolade*. This is all the psychological or moral basis that I can find; and so there is nothing left me but to pronounce the whole thing an antiquated superstition that has taken deep root, and one more of the many examples which show the force of tradition. My view is confirmed by the well-known fact that in China a beating with a bamboo is a very frequent punishment for the common people, and even for officials of every class; which shows that human nature, even in a highly civilized state, does not run in the same groove here and in China.

On the contrary, an unprejudiced view of human nature shows that it is just as natural for man to beat as it is for savage animals to bite and rend in pieces, or for horned beasts to butt or push. Man may be said to be the animal that beats. Hence it is revolting to our sense of the fitness of things to hear, as we sometimes do, that one man has bitten another; on the other hand, it is a natural and everyday occurrence for him to get blows or give them. It is intelligible enough that, as we become educated, we are glad to dispense with blows by a system of mutual restraint. But it is a cruel thing to compel a nation or a single class to regard a blow as an awful misfortune which must have death and murder for its consequences. There are too many genuine evils in the world to allow of our increasing them by imaginary misfortunes, which bring real ones in their train: and yet this is the precise effect of the superstition, which thus proves itself at once stupid and malign.

It does not seem to me wise of governments and legislative bodies to promote any such folly by attempting to do away with flogging as a punishment in civil or military life. Their idea is that they are acting in the interests of humanity; but, in point of fact, they are doing just the opposite; for the abolition of flogging will serve only to strengthen this inhuman and abominable superstition, to which so many sacrifices have already been made. For all offences, except the worst, a beating is the obvious, and therefore the natural penalty; and a man who will not listen to reason will yield to blows. It seems to me right and proper to administer corporal punishment to the man who possesses nothing and

therefore cannot be fined, or cannot be put in prison because his master's interests would suffer by the loss of his services. There are really no arguments against it; only mere talk about *the dignity of man*—talk which proceeds, not from any clear notions on the subject, but from the pernicious superstition I have been describing. That it is a superstition which lies at the bottom of the whole business is proved by an almost laughable example. Not long ago, in the military discipline of many countries, the cat was replaced by the stick. In either case the object was to produce physical pain; but the latter method involved no disgrace, and was not derogatory to honor.

By promoting this superstition, the State is playing into the hands of the principle of knightly honor, and therefore of the duel; while at the same time it is trying, or at any rate it pretends that it is trying, to abolish the duel by legislative enactment. As a natural consequence we find that this fragment of the theory that *might is right*, which has come down to us from the most savage days of the Middle Age, has still in this nineteenth century a good deal of life left in it—more shame to us! It is high time for the principle to be driven out bag and baggage. Nowadays, no one is allowed to set dogs or cocks to fight each other,—at any rate, in England it is a penal offence,—but men are plunged into deadly strife, against their will, by the operation of this ridiculous, superstitious and absurd principle, which imposes upon us the obligation, as its narrow-minded supporters and advocates declare, of fighting with one another like gladiators, for any little trifle. Let me recommend our purists to adopt the expression *baiting*,¹ instead of *duel*, which probaly comes to us, not from the Latin *duellum*, but from the Spanish *duelo*,—meaning suffering, nuisance, annoyance.

In any case, we may well laugh at the pedantic excess to which this foolish system has been carried. It is really revolting that this principle, with its absurd code, can form a power within the State—*imperium in imperio*—a power too easily put in motion, which, recognizing no right but might, tyrannizes over the classes which come within its range, by keeping up a sort of inquisition, before which any one may be haled on the most flimsy pretext, and there and then be tried on an issue of life and death between himself and his opponent. This is the lurking place from which every rascal, if he only belongs to the classes in question, may menace and even exterminate the noblest and best of men, who, as such, must of course be an object of hatred to him. Our system of justice and police-protection has made it impossible in these days for any scoundrel in the street to attack us with—*Your money or your life!* and common sense ought now to be able to prevent rogues disturbing the peaceable intercourse of society by coming at us with—*Your honor or your life!* An end should be put to the burden which weighs upon the higher classes—the burden, I mean, of having to be ready every moment to expose life and

¹ *Ritterhetze.*

limb to the mercy of anyone who takes it into his rascally head to be coarse, rude, foolish or malicious. It is perfectly atrocious that a pair of silly, passionate boys should be wounded, maimed or even killed, simply because they have had a few words.

The strength of this tyrannical power within the State, and the force of the superstition, may be measured by the fact that people who are prevented from restoring their knightly honor by the superior or inferior rank of their aggressor, or anything else that puts the persons on a different level, often come to a tragic-comic end by committing suicide in sheer despair. You may generally know a thing to be false and ridiculous by finding that, if it is carried to its logical conclusion, it results in a contradiction ; and here, too, we have a very glaring absurdity. For an officer is forbidden to take part in a duel ; but if he is challenged and declines to come out, he is punished by being dismissed the service.

As I am on the matter, let me be more frank still. The important distinction, which is often insisted upon, between killing your enemy in a fair fight with equal weapons, and lying in ambush for him, is entirely a corollary of the fact that the power within the State, of which I have spoken, recognizes no other right than might, that is, the right of the stronger, and appeals to a *Judgment of God* as the basis of the whole code. For to kill a man in a fair fight, is to prove that you are superior to him in strength or skill ; and to justify the deed, *you must assume that the right of the stronger is really a right.*

But the truth is that, if my opponent is unable to defend himself, it gives me the possibility, but not by any means the right, of killing him. The *right*, the *moral justification*, must depend entirely upon the *motives* which I have for taking his life. Even supposing that I have sufficient motive for taking a man's life, there is no reason why I should make his death depend upon whether I can shoot or fence better than he. In such a case, it is immaterial in what way I kill him, whether I attack him from the front or the rear. From a moral point of view, the right of the stronger is no more convincing than the right of the more skilful ; and it is skill which is employed if you murder a man treacherously. Might and skill are in this case equally right: in a duel, for instance, both the one and the other come into play : for a feint is only another name for treachery. If I consider myself morally justified in taking a man's life, it is stupid of me to try first of all whether he can shoot or fence better than I ; as, if he can, he will not only have wronged me, but have taken my life into the bargain.

It is Rousseau's opinion that the proper way to avenge an insult is, not to fight a duel with your aggressor, but to assassinate him,—an opinion, however, which he is cautious enough only to barely indicate in a mysterious note to one of the books of his *Emile*. This shows the philosopher so completely under the influence of the mediæval superstition of knightly honor that he considers it justifiable to murder a man

who accuses you of lying : whilst he must have known that every man, and himself especially, has deserved to have the lie given him times without number.

The prejudice which justifies the killing of your adversary, so long as it is done in an open contest and with equal weapons, obviously looks upon might as really right, and a duel as the interference of God. The Italian who, in a fit of rage, falls upon his aggressor wherever he finds him, and despatches him without any ceremony, acts, at any rate, consistently and naturally : he may be cleverer, but he is not worse, than the duelest. If you say I am justified in killing my adversary in a duel, because he is at the moment doing his best to kill me ; I can reply that it is your challenge which has placed him under the necessity of defending himself ; and that by mutually putting it on the ground of self-defence, the combatants are seeking a plausible pretext for committing murder. I should rather justify the deed by the legal maxim *Volenti non fit injuria* ; because the parties mutually agree to set their life upon the issue. This argument may, however, be rebutted by showing that the injured party is not injured *volens* ; because it is this tyrannical principle of knightly honor, with its absurd code, which forcibly drags one at least of the combatants before a bloody inquisition.

I have been rather prolix on the subject of knightly honor, but I had good reasons for being so, because the Augean stable of moral and intellectual enormity in this world can be cleaned out only with the besom of philosophy. There are two things which more than all else serve to make the social arrangements of modern life compare unfavorably with those of antiquity, by giving our age a gloomy, dark and sinister aspect, from which antiquity, fresh, natural and, as it were, in the morning of life, is completely free ; I mean modern honor and modern disease,—*per nobile fratrium* !—which have combined to poison all the relations of life, whether public or private. The second of this noble pair extends its influence much farther than at first appears to be the case, as being not merely a physical, but also a moral disease. From the time that poisoned arrows have been found in Cupid's quiver, an estranging, hostile, nay, devilish element has entered into the relations of men and women, like a sinister thread of fear and mistrust in the warp and woof of their intercourse ; indirectly shaking the foundations of human fellowship, and so more or less affecting the whole tenor of existence. But it would be beside my present purpose to pursue the subject further.

An influence analogous to this, though working on other lines, is exerted by the principle of knightly honor,—that solemn farce, unknown to the ancient world, which makes modern society stiff, gloomy and timid, forcing us to keep the strictest watch on every word that falls. Nor is this all. The principle is a universal Minotaur ; and the goodly company of the sons of noble houses which it demands in yearly tribute,

comes, not from one country alone, as of old, but from every land in Europe. It is high time to make a regular attack upon this foolish system ; and this is what I am trying to do now. Would that these two monsters of the modern world might disappear before the end of the century !

Let us hope that medicine may be able to find some means of preventing the one, and that, by clearing our ideas, philosophy may put an end to the other ; for it is only by clearing our ideas that the evil can be eradicated. Governments have tried to do so by legislation, and failed.

Still, if they are really concerned to suppress the dueling system ; and if the small success that has attended their efforts is really due only to their inability to cope with the evil, I do not mind proposing a law the success of which I am prepared to guarantee. It will involve no sanguinary measures, and can be put into operation without recourse either to the scaffold or the gallows, or to imprisonment for life. It is a small homœopathic pilule, with no serious after effects. If any man send or accept a challenge, let the corporal take him before the guard house, and there give him, in broad daylight, twelve strokes with a stick *à la Chinoise* ; a non-commissioned officer or a private to receive six. If a duel has actually taken place, the usual criminal proceedings should be instituted.

A person with knightly notions might, perhaps, object that, if such a punishment were carried out, a man of honor would possibly shoot himself ; to which I should answer that it is better for a fool like that to shoot himself rather than other people. However, I know very well that governments are not really in earnest about putting down dueling. Civil officials, and much more so, officers in the army (except those in the highest positions), are paid most inadequately for the services they perform ; and the deficiency is made up by honor, which is represented by titles and orders, and, in general, by the system of rank and distinction. The duel is, so to speak, a very serviceable extra-horse for people of rank : so they are trained in the knowledge of it at the universities. The accidents which happen to those who use it make up in blood for the deficiency of the pay.

Just to complete the discussion, let me here mention the subject of *national honor*. It is the honor of a nation as a unit in the aggregate of nations. And as there is no court to appeal to but the court of force ; and as every nation must be prepared to defend its own interests, the honor of a nation consists in establishing the opinion, not only that it may be trusted (its credit), but also that it is to be feared. An attack upon its rights must never be allowed to pass unheeded. It is a combination of civic and of knightly honor.

Section 5.—Fame.

Under the heading of place in the estimation of the world we have put *Fame* ; and this we must now proceed to consider.

Fame and honor are twins ; and twins, too, like Castor and Pollux, of whom the one was mortal and the other was not. Fame is the undying brother of ephemeral honor. I speak, of course, of the highest kind of fame, that is, of fame in the true and genuine sense of the word ; for, to be sure, there are many sorts of fame, some of which last but a day. Honor is concerned merely with such qualities as everyone may be expected to show under similar circumstances ; fame only of those which cannot be required of any man. Honor is of qualities which everyone has a right to attribute to himself ; fame only of those which should be left to others to attribute. Whilst our honor extends as far as people have knowledge of us ; fame runs in advance, and makes us known wherever it finds its way. Every one can make a claim to honor ; very few to fame, as being attainable only in virtue of extraordinary achievements.

These achievements may be of two kinds, either *actions* or *works* ; and so to fame there are two paths open. On the path of actions, a great heart is the chief recommendation ; on that of works, a great head. Each of the two paths has its own peculiar advantages and detriments ; and the chief difference between them is that actions are fleeting, while works remain. The influence of an action, be it never so noble, can last but a short time ; but a work of genius is a living influence, beneficial and ennobling throughout the ages. All that can remain of actions is a memory, and that becomes weak and disfigured by time—a matter of indifference to us, until at last it is extinguished altogether : unless, indeed, history takes it up, and presents it, fossilized, to posterity. Works are immortal in themselves, and once committed to writing, may live forever. Of Alexander the Great we have but the name and the record : but Plato and Aristotle, Homer and Horace are alive, and as directly at work to-day as they were in their own life-time. The *Vedas*, and their *Upanishads*, are still with us : but of all contemporaneous actions not a trace has come down to us. ¹

¹ Accordingly it is a poor compliment, though sometimes a fashionable one, to try to pay honor to a work by calling it an action. For a work is something essentially higher in its nature. An action is always something based on motive, and, therefore, fragmentary and fleeting—a part, in fact, of that Will which is the universal and original element in the constitution of the world. But a great and beautiful work has a permanent character, as being of universal significance, and sprung from the Intellect, which rises, like a perfume, above the faults and follies of the world of Will.

The fame of a great action has this advantage, that it generally starts with a loud explosion ; so loud, indeed, as to be heard all over Europe : whereas the fame of a great work is slow and gradual in its beginnings ; the noise it makes is at first slight, but it goes on growing greater, until at last, after a hundred years perhaps, it attains its full

Another disadvantage under which actions labor is that they depend upon chance for the possibility of coming into existence ; and hence, the fame they win does not flow entirely from their intrinsic value, but also from the circumstances which happened to lend them importance and lustre. Again, the fame of actions, if, as in war, they are purely personal, depends upon the testimony of fewer witnesses; and these are not always present, and even if present, are not always just or unbiassed observers. This advantage, however, is counterbalanced by the fact that actions have the advantage of being of a practical character, and, therefore, within the range of general human intelligence ; so that once the facts have been correctly reported, justice is immediately done ; unless, indeed, the motive underlying the action is not at first properly understood or appreciated. No action can be really understood apart from the motive which prompted it.

It is just the contrary with works. Their inception does not depend upon chance, but wholly and entirely upon their author ; and whatever they are in and for themselves, that they remain as long as they live. Further, there is a difficulty in properly judging them, which becomes all the harder, the higher their character ; often there are no persons competent to understand the work, and often no unbiassed or honest critics. Their fame, however, does not depend upon one judge only ; they can enter an appeal to another. In the case of actions, as I have said, it is only their memory which comes down to posterity, and then only in the traditional form ; but works are handed down themselves, and except when parts of them have been lost, in the form in which they first appeared. In this case there is no room for any disfigurement of the facts ; and any circumstances which may have prejudiced them in their origin, fall away with the lapse of time. Nay, it is often only after the lapse of time that the persons really competent to judge them appear—exceptional critics sitting in judgment on exceptional works, and giving their weighty verdicts in succession. These collectively form a perfectly just appreciation ; and though there are cases where it has taken some hundreds of years to form it, no further lapse of time is able to reverse the verdict ;—so secure and inevitable is the fame of a great work.

Whether authors ever live to see the dawn of their fame depends upon the chance of circumstance, and the higher and more important their works are, the less likelihood there is of their doing so. That was an incomparably fine saying of Seneca's, that fame follows merit as surely as the body casts a shadow ; sometimes falling in front, and sometimes behind. And he goes on to remark that *though the envy of contemporaries be shown by universal silence, there will come those who will judge without*

force ; but then it remains, because the works remain, for thousands of years. But in the other case, when the first explosion is over, the noise it makes grows less and less, and is heard by fewer and fewer persons ; until it ends by the action having only a shadowy existence in the pages of history.

enmity or favor. From this remark it is manifest that even in Seneca's age there were rascals who understood the art of suppressing merit by maliciously ignoring its existence, and of concealing good work from the public in order to favor the bad: it is an art well understood in our day, too, manifesting itself, both then and now, in *an envious conspiracy of silence.*

As a general rule, the longer a man's fame is likely to last, the later it will be in coming; for all excellent products require time for their development. The fame which lasts to posterity is like an oak, of very slow growth; and that which endures but a little while, like plants which spring up in a year and then die; whilst false fame is like a fungus, shooting up in a night and perishing as soon.

And why? For this reason; the more a man belongs to posterity, in other words, to humanity in general, the more of an alien he is to his contemporaries; since his work is not meant for them as such, but only for them in so far as they form part of mankind at large; there is none of that familiar local color about his productions which would appeal to them; and so what he does, fails of recognition because it is strange. People are more likely to appreciate the man who serves the circumstances of his own brief hour, or the temper of the moment,—belonging to it, and living and dying with it.

The general history of art and literature shows that the highest achievements of the human mind are, as a rule, not favorably received at first; but remain in obscurity until they win notice from intelligence of a higher order, by whose influence they are brought into a position which they then maintain, in virtue of the authority thus given them.

If the reason of this should be asked, it will be found that ultimately, a man can really understand and appreciate those things only which are of like nature with himself. The dull person will like what is dull, and the common person what is common; a man whose ideas are mixed will be attracted by confusion of thought; and folly will appeal to him who has no brains at all; but best of all, a man will like his own works, as being of a character thoroughly at one with himself. This is a truth as old as Epicharmus of fabulous memory—

Θαυμαστόν οὐδὲν ἐστὶ με τᾶνθ' οὕτω λέγειν
Καὶ ἀνδάνειν αὐτοῖσιν αὐτούς, καὶ δοκεῖν
Καλῶς πεφυκέναι· καὶ γὰρ ὁ κύων κυνί
Κάλλιστον εἶμεν φαίνεται, καὶ βοῦς βοῦ
"Ὅνος δ' ὄνῳ κάλλιστόν [ἐστίν], ὥς δ' ὕϊ.

The sense of this passage—for it should not be lost—is that we should not be surprised if people are pleased with themselves, and fancy that they are in good case; for to a dog the best thing in the world is a dog; to an ox, an ox; to an ass, an ass; and to a sow, a sow.

The strongest arm is unavailing to give impetus to a feather-weight;

for, instead of speeding on its way and hitting its mark with effect, it will soon fall to the ground, having expended what little energy was given to it, and possessing no mass of its own to be the vehicle of momentum. So it is with great and noble thoughts, nay, with the very masterpieces of genius, when there are none but little, weak, and perverse minds to appreciate them,—a fact which has been deplored by a chorus of the wise in all ages. Jesus, the son of Sirach, for instance, declares that *He that telleth a tale to a fool speaketh to one in slumber : when he hath told his tale, he will say, What is the matter ?*¹ And Hamlet says, *A knavish speech sleeps in a fool's ear.*² And Goethe is of the same opinion, that a dull ear mocks at the wisest word,

*Das glücklichste Wort es wird verhöhnt,
Wenn der Hörer ein Schiefzehr ist :*

and again, that we should not be discouraged if people are stupid, for you can make no rings if you throw your stone into a marsh.

*Du wirkst nicht, Alles bleibt so stumpf :
Sei guter Dinge !
Der Stein in Sumpf
Macht keine Ringe.*

Lichtenberg asks : *When a head and a book come into collision, and one sounds hollow, is it always the book ?* And in another place : *Works like this are as a mirror ; if an ass looks in, you cannot expect an apostle to look out.* We should do well to remember old Gellert's fine and touching lament, that the best gifts of all find the fewest admirers, and that most men mistake the bad for the good,—a daily evil that nothing can prevent, like a plague which no remedy can cure. There is but one thing to be done, though how difficult!—the foolish must become wise,—and that they can never be. The value of life they never know ; they see with the outer eye but never with the mind, and praise the trivial because the good is strange to them :—

*Nie kennen sie den Werth der Dinge,
Ihr Auge schliesst, nicht ihr Verstand ;
Sie loben ewig das Geringe
Weil sie das Gute nie gekannt.*

To the intellectual incapacity which, as Goethe says, fails to recognize and appreciate the good which exists, must be added something which comes into play everywhere, the moral baseness of mankind, here taking the form of envy. The new fame that a man wins raises him afresh over the heads of his fellows, who are thus degraded in proportion. All conspicuous merit is obtained at the cost of those who possess none ;

¹ Ecclesiasticus, xxii., 8.

² Act iv., sc. 2.

or, as Goethe has it in the *West östlicher Divan*, another's praise is one's own depreciation—

*Wenn wir Andern Ehre geben
Müssen wir uns selbst entadeln.*

We see, then, how it is that, whatever be the form which excellence takes, mediocrity, the common lot of by far the greatest number, is leagued against it in a conspiracy to resist, and if possible, to suppress it. The pass-word of this league is *À bas le mérite*. Nay more ; those who have done something themselves, and enjoy a certain amount of fame, do not care about the appearance of a new reputation, because its success is apt to throw theirs into the shade. Hence, Goethe declares that if we had to depend for our life upon the favor of others, we should never have lived at all ; from their desire to appear important themselves, people gladly ignore our very existence :—

*Hätte ich gezaudert zu werden,
Bis man mir's Leben gegönnt,
Ich wäre noch nicht auf Erden,
Wie ihr begreifen könnt,
Wenn ihr seht, wie sie sich geberden,
Die, um etwas zu scheinen,
Mich gerne möchten verneinen.*

Honor, on the contrary, generally meets with fair appreciation, and is not exposed to the onslaught of envy ; nay, every man is credited with the possession of it until the contrary is proved. But fame has to be won in despite of envy, and the tribunal which awards the laurel is composed of judges biassed against the applicant from the very first. Honor is something which we are able and ready to share with everyone ; fame suffers encroachment and is rendered more unattainable in proportion as more people come by it. Further, the difficulty of winning fame by any given work stands in inverse ratio to the number of people who are likely to read it ; and hence it is so much harder to become famous as the author of a learned work than as a writer who aspires only to amuse. It is hardest of all in the case of philosophical works, because the result at which they aim is rather vague, and, at the same time, useless from a material point of view ; they appeal chiefly to readers who are working on the same lines themselves.

It is clear, then, from what I have said as to the difficulty of winning fame, that those who labor, not out of love for their subject, nor from pleasure in pursuing it, but under the stimulus of ambition, rarely or never leave mankind a legacy of immortal works. The man who seeks to do what is good and genuine, must avoid what is bad, and be ready to defy the opinions of the mob, nay, even to dispise it and its misleaders. Hence the truth of the remark (especially insisted upon by Osorius *de Gloria*), that fame shuns those who seek it, and seeks those who shun it ;

for the one adapt themselves to the taste of their contemporaries, and the others work in defiance of it.

But, difficult though it be to acquire fame, it is an easy thing to keep it when once acquired. Here, again, fame is in direct opposition to honor, with which everyone is presumably to be accredited. Honor has not to be won ; it must only not be lost. But there lies the difficulty ! For, by a single unworthy action, it is gone irretrievably. But fame, in the proper sense of the word, can never disappear ; for the action or work by which it was acquired can never be undone ; and fame attaches to its author, even though he does nothing to deserve it anew. The fame which vanishes, or is outlived, proves itself thereby to have been spurious, in other words, unmerited, and due to a momentary overestimate of a man's work ; not to speak of the kind of fame which Hegel enjoyed, and which Lichtenberg describes as *trumpeted forth by a clique of admiring undergraduates—the resounding echo of empty heads ;—such a fame as will make posterity smile when it lights upon a grotesque architecture of words, a fine nest with the birds long ago flown ; it will knock at the door of this decayed structure of conventionalities and find it utterly empty !—not even a trace of thought there to invite the passer-by.*

The truth is that fame means nothing but what a man is in comparison with others. It is essentially relative in character, and therefore only indirectly valuable ; for it vanishes the moment other people become what the famous man is. Absolute value can be predicated only of what a man possesses under any and all circumstances,—here, what a man is directly and in himself. It is the possession of a great heart or a great head, and not the mere fame of it, which is worth having, and conducive to happiness. Not fame, but that which deserves to be famous, is what a man should hold in esteem. This is, as it were, the true underlying substance, and fame is only an accident, affecting its subject chiefly as a kind of external symptom, which serves to confirm his own opinion of himself. Light is not visible unless it meets with something to reflect it ; and talent is sure of itself only when its fame is noised abroad. But fame is not a certain symptom of merit ; because you can have the one without the other ; or, as Lessing nicely puts it, *Some people obtain fame, and others deserve it.*

It would be a miserable existence which should make its value or want of value depend upon what other people think ; but such would be the life of a hero or a genius if its worth consisted in fame, that is, in the applause of the world. Every man lives and exists on his own account, and, therefore, mainly in and for himself ; and what he is and the whole manner of his being concern himself more than any one else ; so if he is not worth much in this respect, he cannot be worth much otherwise. The idea which other people form of his existence is something secondary, derivative, exposed to all the chances of fate, and in the end affecting him but very indirectly. Besides, other people's heads are a wretched

place to be the home of a man's true happiness—a fanciful happiness perhaps, but not a real one.

And what a mixed company inhabits the Temple of Universal Fame!—generals, ministers, charlatans, jugglers, dancers, singers, millionaires and Jews! It is a temple in which more sincere recognition, more genuine esteem, is given to the several excellences of such folk, than to superiority of mind, even of a high order, which obtains from the great majority only a verbal acknowledgment.

From the point of view of human happiness, fame is, surely, nothing but a very rare and delicate morsel for the appetite that feeds on pride and vanity—an appetite which, however carefully concealed, exists to an immoderate degree in every man, and is, perhaps, strongest of all in those who set their hearts on becoming famous at any cost. Such people generally have to wait some time in uncertainty as to their own value, before the opportunity comes which will put it to the proof and let other people see what they are made of; but until then, they feel as if they were suffering secret injustice.¹

But, as I explained at the beginning of this chapter, an unreasonable value is set upon other people's opinion, and one quite disproportionate to its real worth. Hobbes has some strong remarks on this subject; and no doubt he is quite right. *Mental pleasure*, he writes, *and ecstasy of any kind, arise when, on comparing ourselves with others, we come to the conclusion that we may think well of ourselves.* So we can easily understand the great value which is always attached to fame, as worth any sacrifices if there is the slightest hope of attaining it.

*Fame is the spur that the clear spirit doth raise
(That last infirmity of noble mind)
To scorn delights and live laborious days.*²

And again:

*How hard it is to climb
The heights where Fame's proud temple shines afar!*

We can thus understand how it is that the vainest people in the world are always talking about *la gloire*, with the most implicit faith in it as a stimulus to great actions and great works. But there can be no doubt that fame is something secondary in its character, a mere echo or reflection—as it were, a shadow or symptom—of merit: and, in any case, what excites admiration must be of more value than the admiration itself. The truth is that a man is made happy, not by fame, but by that which brings him fame, by his merits, or to speak more correctly, by the disposition and capacity from which his merits proceed, whether they be moral or intellectual. The best side of a man's nature must of necessity be

¹ Our greatest pleasure consists in being admired; but those who admire us, even if they have every reason to do so, are slow to express their sentiments. Hence he is the happiest man who, no matter how, manages sincerely to admire himself—so long as other people leave him alone.

² Milton. *Lycidas*.

more important for him than for anyone else : the reflection of it, the opinion which exists in the heads of others, is a matter that can effect him only in a very subordinate degree. He who deserves fame without getting it possesses by far the more important element of happiness, which should console him for the loss of the other. It is not that a man is thought to be great by masses of incompetent and often infatuated people, but that he really is great, which should move us to envy his position ; and his happiness lies, not in the fact that posterity will hear of him, but that he is the creator of thoughts worthy to be treasured up and studied for hundreds of years.

Besides, if a man has done this, he possesses something which cannot be wrested from him ; and, unlike fame, it is a possession dependent entirely upon himself. If admiration were his chief aim, there would be nothing in him to admire. This is just what happens in the case of false, that is unmerited, fame ; for its recipient lives upon it without actually possessing the solid substratum of which fame is the outward and visible sign. False fame must often put its possessor out of conceit with himself ; for the time may come when, in spite of the illusions born of self-love, he will feel giddy on the heights which he was never meant to climb, or look upon himself as spurious coin ; and in the anguish of threatened discovery and well-merited degradation, he will read the sentence of posterity on the foreheads of the wise—like a man who owes his property to a forged will.

The truest fame, the fame that comes after death, is never heard of by its recipient ; and yet he is called a happy man. His happiness lay both in the possession of those great qualities which won him fame, and in the opportunity that was granted him of developing them—the leisure he had to act as he pleased, to dedicate himself to his favorite pursuits. It is only work done from the heart that ever gains the laurel.

Greatness of soul, or wealth of intellect, is what makes a man happy—intellect, such as, when stamped on its productions, will receive the admiration of centuries to come,—thoughts which made him happy at the time, and will in their turn be a source of study and delight to the noblest minds of the most remote posterity. The value of posthumous fame lies in deserving it ; and this is its own reward. Whether works destined to fame attain it in the life-time of their author is a chance affair, of no very great importance. For the average man has no critical power of his own and is absolutely incapable of appreciating the difficulty of a great work. People are always swayed by authority ; and where fame is widespread, it means that ninety-nine out of a hundred take it on faith alone. If a man is famed far and wide in his own life-time, he will, if he is wise, not set too much value upon it, because it is no more than the echo of a few voices, which the chance of a day has touched in his favor.

Would a musician feel flattered by the loud applause of an audience if he knew that they were nearly all deaf, and that to conceal their

infirmity, they set to work to clap vigorously as soon as ever they saw one or two persons applauding? And what would he say if he got to know that those one or two persons had often taken bribes to secure the loudest applause for the poorest player!

It is easy to see why contemporary praise so seldom develops into posthumous fame. D'Alembert, in an extremely fine description of the temple of literary fame, remarks that the sanctuary of the temple is inhabited by the great dead, who during their life had no place there, and by a very few living persons, who are nearly all ejected on their death. Let me remark, in passing, that to erect a monument to a man in his lifetime is as much as declaring that posterity is not to be trusted in its judgment of him. If a man does happen to see his own true fame, it can very rarely be before he is old, though there have been artists and musicians who have been exceptions to this rule, but very few philosophers. This is confirmed by the portraits of people celebrated by their works; for most of them are taken only after their subjects have attained celebrity, generally depicting them as old and grey; more especially if philosophy has been the work of their lives. From a eudæmonistic standpoint, this is a very proper arrangement; as fame and youth are too much for a mortal at one and the same time. Life is such a poor business that the strictest economy must be exercised in its good things. Youth has enough and to spare in itself, and must rest content with what it has. But when the delights and joys of life fall away in old age, as the leaves from a tree in autumn, fame buds forth opportunely, like a plant that is green in winter. Fame is, as it were, the fruit that must grow all the summer before it can be enjoyed at Yule. There is no greater consolation in age than the feeling of having put the whole force of one's youth into works which still remain young.

Finally, let us examine a little more closely the kinds of fame which attach to various intellectual pursuits; for it is with fame of this sort that my remarks are more immediately concerned.

I think it may be said broadly that the intellectual superiority it denotes consists in forming theories, that is, new combinations of certain facts. These facts may be of very different kinds; but the better they are known, and the more they come within everyday experience, the greater and wider will be the fame which is to be won by theorizing about them. For instance, if the facts in question are numbers or lines or special branches of science, such as physics, zoology, botany, anatomy, or corrupt passages in ancient authors, or undecipherable inscriptions, written, it may be, in some unknown alphabet, or obscure points in history; the kind of fame which may be obtained by correctly manipulating such facts will not extend much beyond those who make a study of them—a small number of persons, most of whom lived retired lives and are envious of others who become famous in their special branch of knowledge.

But if the facts be such as are known to everyone, for example, the fundamental characteristics of the human mind or the human heart, which are shared by all alike ; or the great physical agencies which are constantly in operation before our eyes, or the general course of natural laws; the kind of fame which is to be won by spreading the light of a new and manifestly true theory in regard to them, is such as in time will extend almost all over the civilized world: for if the facts be such as everyone can grasp, the theory also will be generally intelligible. But the extent of the fame will depend upon the difficulties overcome ; and the more generally known the facts are, the harder it will be to form a theory that shall be both new and true : because a great many heads will have been occupied with them, and there will be little or no possibility of saying anything that has not been said before.

On the other hand, facts which are not accessible to everybody, and can be got at only after much difficulty and labor, nearly always admit of new combinations and theories : so, that, if sound understanding and judgment are brought to bear upon them—qualities which do not involve very high intellectual power—a man may easily be so fortunate as to light upon some new theory in regard to them which shall be also true. But fame won on such paths does not extend much beyond those who possess a knowledge of the facts in question. To solve problems of this sort requires, no doubt, a great deal of study and labor, if only to get at the facts ; whilst on the path where the greatest and most widespread fame is to be won, the facts may be grasped without any labor at all. But just in proportion as less labor is necessary, more talent or genius is required ; and between such qualities and the drudgery of research no comparison is possible, in respect either of their intrinsic value, or of the estimation in which they are held.

And so people who feel that they possess solid intellectual capacity and a sound judgment, and yet cannot claim the highest mental powers, should not be afraid of laborious study ; for by its aid they may work themselves above the great mob of humanity who have the facts constantly before their eyes, and reach those secluded spots which are accessible to learned toil. For this is a sphere where there are infinitely fewer rivals, and a man of only moderate capacity may soon find an opportunity of proclaiming a theory that shall be both new and true ; nay, the merit of his discovery will partly rest upon the difficulty of coming at the facts. But applause from one's fellow-students, who are the only persons with a knowledge of the subject, sounds very faint to the far-off multitude. And if we follow up this sort of fame far enough, we shall at last come to a point where facts very difficult to get at are in themselves sufficient to lay a foundation of fame, without any necessity for forming a theory ;—travels, for instance, in remote and little-known countries, which make a man famous by what he has seen, not by what he has thought. The great advantage of this kind of fame is that to relate what one has seen,

is much easier than to impart one's thoughts, and people are apt to understand descriptions better than ideas, reading the one more readily than the other : for, as Asmus says,

*When one goes forth a-voyaging
He has a tale to tell.*

And yet, for all that, a personal acquaintance with celebrated travelers often reminds us of a line from Horace—new scenes do not always mean new ideas—

*Coelum non animum mutant qui trans mare currunt.*¹

But if a man finds himself in possession of great mental faculties, such as alone should venture on the solution of the hardest of all problems—those which concern nature as a whole and humanity in its widest range, he will do well to extend his view equally in all directions, without ever straying too far amid the intricacies of various by-paths, or invading regions little known ; in other words, without occupying himself with special branches of knowledge, to say nothing of their petty details. There is no necessity for him to seek out subjects difficult of access, in order to escape a crowd of rivals ; the common objects of life will give him material for new theories at once serious and true ; and the service he renders will be appreciated by all those—and they form a great part of mankind—who know the facts of which he treats. What a vast distinction there is between students of physics, chemistry, anatomy, mineralogy, zoology, philology, history, and the men who deal with the great facts of human life, the poet and the philosopher !

¹ Epist. I. II



CHRISTIANITY AND AGNOSTICISM

A CONTROVERSY

CONSISTING OF PAPERS BY

HENRY WACE, D.D., PROF. THOS. H. HUXLEY,
THE BISHOP OF PETERBOROUGH,
W. H. MALLOCK.



CONTENTS.

I. ON AGNOSTICISM. By HENRY WACE, D. D., Prebendary of St. Paul's Cathedral; Principal of King's College, London.....	339
(Read at the Manchester Church Congress, 1889.)	
II. AGNOSTICISM. By Prof. THOMAS H. HUXLEY.....	343
(From "The Nineteenth Century," February, 1889.)	
III. AGNOSTICISM. A Reply to Prof. HUXLEY. By HENRY WACE, D. D....	364
(From "The Nineteenth Century," March, 1889.)	
IV. AGNOSTICISM. By W. C. MAGEE, D. D., Bishop of Petersburg.....	378
(From "The Nineteenth Century," March, 1889.)	
V. AGNOSTICISM: A REJOINDER. By Prof. THOMAS H. HUXLEY.....	380
(From "The Nineteenth Century," April, 1889.)	
VI. CHRISTIANITY AND AGNOSTICISM. By HENRY WACE, D. D.....	400
(From "The Nineteenth Century," May, 1889.)	
VII. AN EXPLANATION TO PROF. HUXLEY. By W. C. MAGEE, D. D., Bishop of Peterborough	417
(From "The Nineteenth Century," May, 1889.)	
VIII. THE VALUE OF WITNESS TO THE MIRACULOUS. By Prof. THOMAS H. HUXLEY	418
(From "The Nineteenth Century," March, 1889.)	
IX. AGNOSTICISM AND CHRISTIANITY. By Prof. THOMAS H. HUXLEY.	430
(From "The Nineteenth Century," June, 1889.)	
X. "COWARDLY AGNOSTICISM." A WORD WITH PROF. HUXLEY. By W. H. MALLOCK	453
(From "The Fortnightly Review," April, 1889.)	

Beacon Lights OF Science

I

ON AGNOSTICISM

A PAPER READ AT THE MANCHESTER CHURCH CONGRESS, 1886

By HENRY WACE, D. D.,

PREBENDARY OF ST. PAUL'S CATHEDRAL; PRINCIPAL OF KING'S COLLEGE, LONDON.

WHAT is agnosticism? In the new Oxford "Dictionary of the English Language," we are told that "an agnostic is one who holds that the existence of anything beyond and behind natural phenomena is unknown, and (so far as can be judged) unknowable, and especially that a First Cause and an unseen world are subjects of which we know nothing." The same authority quotes a letter from Mr. R. H. Hutton, stating that the word was suggested in his hearing, at a party held in 1869, by Prof. Huxley, who took it from St. Paul's mention of the altar at Athens to the Unknown God. "Agnostic," it is further said, in a passage quoted from the "Spectator" of June 11, 1876, "was the name demanded by Prof. Huxley for those who disclaimed atheism, and believed with him in an unknown and unknowable God, or, in other words, that the ultimate origin of all things must be some cause unknown and unknowable." Again, the late honored bishop of this diocese is quoted as saying, in the "Manchester Guardian" in 1880, that "the agnostic neither denied nor affirmed God. He simply put him on one side." The designation was suggested, therefore, for the purpose of avoiding a direct denial of beliefs respecting God such as are asserted by our faith. It proceeds, also, from a scientific source, and claims the scientific merit, or habit, of reserving opinion respecting matters not known or proved.

Now we are not here concerned with this doctrine as a mere question of abstract philosophy respecting the limits of our natural capacities. We have to consider it in relation to the Church and to Christianity, and the main consideration which it is the purpose of this paper to suggest is that, in this relation, the adoption of the term agnostic is only an attempt to shift the issue, and that involves a mere evasion. A Christian Catechism says: "First, I learn to believe in God the Father, who hath made me, and all the world; secondly, in God the Son, who hath redeemed me, and all mankind; thirdly, in God the Holy Ghost, who sanctifieth me, and all the elect people of God." The agnostic says: "How do you know all that? I consider I have no means of knowing these things you assert respecting God. I do not know, and can not know that God is a Father, and that he has a Son; and I do not and can not know that such a Father made me, or that such a Son redeemed me." But the Christian did not speak of what he knew, but of what he believed. The first word of a Christian is not "I know," but "I believe." He professes, not a science, but a faith; and at baptism he accepts, not a theory, but a creed.

Now it is true that in one common usage of the word, belief is practically equivalent to opinion. A man may say he believes in a

scientific theory, meaning that he is strongly of opinion that it is true; or, in still looser language, he may say he believes it is going to be a fine day. I would observe, in passing, that even in this sense of the word, a man who refused to act upon what he could not know would be a very unpractical person. If you are suffering from an obscure disease, you go to a doctor to obtain, not his knowledge of your malady, but his opinion; and upon that opinion, in defiance of other opinions, even an emperor may have to stake his life. Similarly, from what is known of the proceedings in Parliament respecting the Manchester Ship-Canal, it may be presumed that engineers were not unanimous as to the possibilities and advantages of that undertaking; but Manchester men were content to act upon the best opinion, and to stake fortunes on their belief in it. However, it may be sufficient to have just alluded to the old and unanswered, contention of Bishop Butler that, even if Christian belief and Christian duty were mere matters of probable opinion, a man who said in regard to them, "I do not know, and therefore I will not act," would be abandoning the first principle of human energy. He might be a philosopher; but he would not be a man—not at least, I fancy, according to the standard of Lancashire.

But there is another sense of the word "belief," which is of far more importance for our present subject. There is belief which is founded on the assurances of another person, and upon our trust in him. This sort of belief is not opinion, but faith; and it is this which has been the greatest force in creating religions, and through them in molding civilizations. What made the Mohammedan world? Trust and faith in the declarations and assurances of Mohammed. And what made the Christian world? Trust and faith in the declarations and assurances of Jesus Christ and his apostles. This is not mere believing about things; It is believing a man and believing in a man. Now, the point of importance for the present argument is, that the chief articles of the Christian creed are directly dependent on personal assurances and personal declarations, and that our acceptance of them depends on personal trust. Why do we believe that Jesus Christ redeemed all mankind? Because he said so. There is no other ultimate ground for it. The matter is not one open to the observation of our faculties; and as a matter of science we are not in a position to know it. The case is the same with his divine Sonship and the office of his Spirit. He reveals himself by his words and acts; and in revealing himself he reveals his Father, and the Spirit who proceeds from both. His resurrection and his miracles afford us, as St. Paul says, assurance of his divine mission. But for our knowledge of his offices in relation to mankind, and of his nature in relation to God, we rest on his own words, confirmed and explained by those of his apostles. Who can dream of knowing, as a matter of science, that he is the Judge of quick and dead? But he speaks himself, in the Sermon on the Mount, of that day when men will plead before him, and when he will decide their fate; and Christians include in their creed a belief in that statement respecting the unseen and future world.

But if this be so, for a man to urge as an escape from this article of belief that he has no means of a scientific knowledge of the unseen world, or of the future, is irrelevant. His difference from Christians lies not in the fact that he has no knowledge of these things, but that

he does not believe the authority on which they are stated. He may prefer to call himself an agnostic; but his real name is an older one—he is an infidel; that is to say, an unbeliever. The word infidel, perhaps, carries an unpleasant significance. Perhaps it is right that it should. It is, and it ought to be, an unpleasant thing for a man to have to say plainly that he does not believe in Jesus Christ. It is, indeed, an awful thing to say. But even men who are not conscious of all it involves shrink from the ungraciousness, if from nothing more, of treating the beliefs inseparably associated with that sacred Person as an illusion. This, however, is what is really meant by agnosticism; and the time seems to have come when it is necessary to insist upon the fact.

Of course, there may be numberless attempts at respectful excuses or evasions, and there is one in particular which may require notice. It may be asked how far we can rely on the accounts we possess of our Lord's teaching on these subjects. Now it is unnecessary for the general argument before us to enter on those questions respecting the authenticity of the Gospel narratives, which ought to be regarded as settled by M. Renan's practical surrender of the adverse case. Apart from all disputed points of criticism, no one practically doubts that our Lord lived, and that he died on the cross, in the most intense sense of filial relation to his Father in heaven, and that he bore testimony to that Father's providence, love, and grace toward mankind. The Lord's Prayer affords sufficient evidence upon these points. If the Sermon on the Mount alone be added, the whole unseen world, of which the agnostic refuses to know anything, stands unveiled before us. There you see revealed the divine Father and Creator of all things, in personal relation to his creatures, hearing their prayers, witnessing their actions, caring for them and rewarding them. There you hear of a future judgment administered by Christ himself and, of a heaven to be hereafter revealed, in which those who live as the children of that Father, and who suffer in the cause and for the sake of Christ himself, will be abundantly rewarded. If Jesus Christ preached that sermon, made those promises, and taught that prayer, then any one who says that we know nothing of God, or of a future life, or of an unseen world, says that he does not believe Jesus Christ. Since the days when our Lord lived and taught, at all events, agnosticism has been impossible without infidelity.

Let it be observed, moreover, that to put the case in this way is not merely to make an appeal to authority. It goes further than that. It is in a vital respect an appeal to experience, and so far to science itself. It is an appeal to what I hope may be taken as, confessedly, the deepest and most sacred moral experience which has ever been known. No criticism worth mentioning doubts the story of the Passion; and that story involves the most solemn attestation, again and again, of truths of which an agnostic coolly says he knows nothing. An agnosticism which knows nothing of the relation of man to God must not only refuse belief to our Lord's most undoubted teaching, but must deny the reality of the spiritual convictions in which he lived and died. It must declare that his most intimate, most intense beliefs, and his dying aspirations, were an illusion. Is that supposition tolerable? It is because it is not tolerable that men would fain avoid facing it, and would have themselves called agnostics rather than infidels; but I know not whether this cool and

supercilious disregard of that solemn teaching, and of that sacred life and death, be not more offensive than the downright denials which look their responsibility boldly in the face, and say, not only that they do not know, but that they do not believe. This question of a living faith in a living God and Saviour, with all it involves, is too urgent and momentous a thing to be put aside with a philosophical "I don't know." The best blood of the world has been shed over it; the deepest personal, social, and even political problems are still bound up with it. The intensest moral struggles of humanity have centered round this question, and it is really intolerable that all this bitter experience of men and women who have trusted and prayed, and suffered and died, in faith, should be set aside as not germane to a philosophical argument.

But, to say the least, from a purely scientific point of view, there is a portentous fallacy in the manner in which, in agnostic arguments, the testimony, not only of our Lord, but of psalmists, prophets, apostles, and saints, is disregarded. So far as the Christian faith can be treated as a scientific question, it is a question of experience; and what is to be said of a science which leaves out of account the most conspicuous and most influential experience in the matter? One thing may be said with confidence: that it defeats itself, by disregarding the greatest force with which it has to contend. While philosophers are arguing as to the abstract capacities of human thought, as though our Lord had never lived and died, he himself is still speaking; his words, as recorded by his apostles and evangelists, are still echoing over human hearts, touching their inmost affections, appealing to their deepest needs, commanding their profoundest trust, and awakening in them an apprehension of that divine relation and those unseen realities in which their spirits live. While agnostics are committing the enormous scientific as well as moral blunder of considering the relations of men to God and to an unseen world without taking his evidence into account, and then presuming to judge the faith he taught by their own partial knowledge, his word is still heard, in penetrating and comfortable words, bidding men believe in God and believe also in himself. He, after all, is the one sufficient answer to agnosticism, and—I will take the liberty of adding—to atheism and to pessimism also. Not merely his authority, though that would be enough, but his life, his soul, himself.

Accordingly, as our object here is to consider how to deal with these difficulties and objections, what these considerations would seem to point out is that we should take care to let Christ and Christ's own message be heard, and not to endure that they should be allowed to stand aside while a philosophical debate is proceeding. Philosophers are slow in these matters. They are still disputing, after some twenty five hundred years of discussion, what is the true principle for determining moral right and wrong. Meanwhile men have been content to live by the Ten Commandments, and the main lines of duty are plain. In the same way religion has preceded the philosophy of religion, and men can be made sensible of their relation to God whether it can be philosophically explained or not. The Psalms, the Prophets, and, above all, the Gospels, are plain evidence, in matter of fact, that men are in relation to God and owe duties to him. Let men be made to attend to the facts; let them hear those simple, plain, and earnest witnesses; above all, let them hear the voice of

Christ, and they will at least believe, whatever may be the possibilities of knowledge. In a word, let us imitate St. Paul when his converts were perplexed by Greek philosophies at Corinth: "I, brethren, when I came to you, came not with excellency of speech or of wisdom, declaring unto you the testimony of God; for I determined not to know anything among you save Jesus Christ and him crucified."

II.

AGNOSTICISM.

BY PROF. THOMAS H. HUXLEY.

WITHIN the last few months the public has received much and varied information on the subject of agnostics, their tenets, and even their future. Agnosticism exercised the orators of the Church Congress at Manchester.* It has been furnished with a set of "articles" fewer, but not less rigid, and certainly not less consistent than the thirty-nine; its nature has been analyzed, and its future severely predicted by the most eloquent of that prophetic school whose Samuel is Auguste Comte. It may still be a question, however, whether the public is as much the wiser as might be expected, considering all the trouble that has been taken to enlighten it. Not only are the three accounts of the agnostic position sadly out of harmony with one another, but I propose to show cause for my belief that all three must be seriously questioned by any one who employs the term "agnostic" in the sense in which it was originally used. The learned principal of King's College, who brought the topic of agnosticism before the Church Congress, took a short and easy way of settling the business:

But if this be so, for a man to urge, as an escape from this article of belief, that he has no means of a scientific knowledge of the unseen world, or of the future, is irrelevant. His difference from Christians lies not in the fact that he has no knowledge of these things, but that he does not believe the authority on which they are stated. He may prefer to call himself an agnostic; but his real name is an older one—he is an infidel; that is to say, an unbeliever. The word infidel, perhaps, carries an unpleasant significance. Perhaps it is right that it should. It is, and ought to be, an unpleasant thing for a man to have to say plainly that he does not believe in Jesus Christ.

And in the course of the discussion which followed, the Bishop of Peterborough departed so far from his customary courtesy and self-respect as to speak of "cowardly agnosticism" (p. 262).

So much of Dr. Wace's address either explicitly or implicitly concerns me, that I take upon myself to deal with it; but, in so doing, it must be understood that I speak for myself alone; I am not aware that there is any sect of Agnostics; and if there be, I am not its acknowledged prophet or pope. I desire to leave to the Comtists the entire monopoly of the manufacture of imitation ecclesiasticism.

Let us calmly and dispassionately consider Dr. Wace's appreciation of agnosticism. The agnostic, according to his view, is a person who says he has no means of attaining a scientific knowledge of the unseen world or of the future; by which somewhat loose phraseology Dr. Wace presumably means the theological unseen world and future. I can not think this description happy either in form or substance, but

* See the "Official Report of the Church Congress held at Manchester," October, 1888, pp. 253, 264.

for the present it may pass. Dr. Wace continues, that it is not "his difference from Christians." Are there, then, any Christians who say that they know nothing about the unseen world and the future? I was ignorant of the fact, but I am ready to accept it on the authority of a professional theologian, and I proceed to Dr. Wace's next proposition.

The real state of the case, then, is that the agnostic "does not believe the authority" on which "these things" are stated, which authority is Jesus Christ. He is simply an old-fashioned "infidel" who is afraid to own to his right name. As "Presbyter is priest writ large," so is "agnostic" the mere Greek equivalent for the Latin "infidel." There is an attractive simplicity about this solution of the problem; and it has that advantage of being somewhat offensive to the persons attacked, which is so dear to the less refined sort of controversialist. The agnostic says, "I can not find good evidence that so and so is true." "Ah," says his adversary, seizing his opportunity, "then you declare that Jesus Christ was untruthful, for he said so and so"; a very telling method of rousing prejudice. But suppose that the value of the evidence as to what Jesus may have said and done, and as to the exact nature and scope of his authority, is just that which the agnostic finds it most difficult to determine? If I venture to doubt that the Duke of Wellington gave the command, "Up, Guards, and at 'em!" at Waterloo, I do not think that even Dr. Wace would accuse me of disbelieving the duke. Yet it would be just as reasonable to do this as to accuse any one of denying what Jesus said before the preliminary question as to what he did say is settled.

Now, the question as to what Jesus really said and did is strictly a scientific problem, which is capable of solution by no other methods than those practiced by the historian and the literary critic. It is a problem of immense difficulty, which has occupied some of the best heads in Europe for the last century; and it is only of late years that their investigations have begun to converge toward one conclusion.*

That kind of faith which Dr. Wace describes and lauds is of no use here. Indeed, he himself takes pains to destroy its evidential value.

"What made the Mohammedan world? Trust and faith in the declarations and assurances of Mohammed. And what made the Christian world? Trust and faith in the declarations and assurances of Jesus Christ and his apostles" (*loc. cit.*, p. 253). The triumphant tone of this imaginary catechism leads me to suspect that its author has hardly appreciated its full import. Presumably, Dr. Wace regards Mohammed as an unbeliever, or, to use the term which he prefers, infidel; and considers that his assurances have given rise to a vast delusion, which has led, and is leading, millions of men straight to everlasting punishment. And this being so, the "trust and faith" which have "made the Mohammedan world," in just the same sense as they have "made the Christian

* Dr. Wace tells us, "It may be asked how far we can rely on the accounts we possess of our Lord's teaching on these subjects." And he seems to think the question appropriately answered by the assertion that it "ought to be regarded as settled by M. Renan's practical surrender of the adverse case." I thought I knew M. Renan's works pretty well, but I have contrived to miss this "practical" (I wish Dr. Wace had defined the scope of that useful adjective) surrender. However, as Dr. Wace can find no difficulty in pointing out the passage of M. Renan's writings, by which he feels justified in making his statement, I shall wait for further enlightenment, contenting myself, for the present, with remarking that if M. Renan were to retract and do penance in Notre Dame to-morrow for any contributions to Biblical criticism that may be specially his property, the main results of that criticism as they are set forth in the works of Strauss, Baur, Reuss, and Volkmar, for example, would not be sensibly affected.

world," must be trust and faith in falsehood. No man who has studied history, or even attended to the occurrences of every-day life, can doubt the enormous practical value of trust and faith; but as little will he be inclined to deny that this practical value has not the least relation to the reality of the objects of that trust and faith. In examples of patient constancy of faith and of unswerving trust, the "Acta Martyrum" do not excel the annals of Babism.

The discussion upon which we have now entered goes so thoroughly to the root of the whole matter; the question of the day is so completely, as the author of "Robert Elsmere" says, the value of testimony, that I shall offer no apology for following it out somewhat in detail; and, by way of giving substance to the argument, I shall base what I have to say upon a case, the consideration of which lies strictly within the province of natural science, and of that particular part of it known as the physiology and pathology of the nervous system.

I find, in the second Gospel (chap. v), a statement, to all appearance intended to have the same evidential value as any other contained in that history. It is the well-known story of the devils who were cast out of a man, and ordered, or permitted, to enter into a herd of swine, to the great loss and damage of the innocent Gerasene, or Gadarene, pig-owners. There can be no doubt that the narrator intends to convey to his readers his own conviction that this casting out and entering in were effected by the agency of Jesus of Nazareth; that, by speech and action, Jesus enforced this conviction; nor does any inkling of the legal and moral difficulties of the case manifest itself.

On the other hand, everything that I know of physiological and pathological science leads me to entertain a very strong conviction that the phenomena ascribed to possession are as purely natural as those which constitute small-pox; everything that I know of anthropology leads me to think that the belief in demons and demonical possession is a mere survival of a once universal superstition, and that its persistence at the present time is pretty much in the inverse ratio of the general instruction, intelligence, and sound judgment of the population among whom it prevails. Everything that I know of law and justice convinces me that the wanton destruction of other people's property is a misdemeanor of evil example. Again, the study of history, and especially of that of the fifteenth, sixteenth, and seventeenth centuries, leaves no shadow of doubt on my mind that the belief in the reality of possession and of witchcraft, justly based, alike by Catholics and Protestants, upon this and innumerable other passages in both the Old and New Testaments, gave rise, through the special influence of Christian ecclesiastics, to the most horrible persecutions and judicial murders of thousands upon thousands of innocent men, women, and children. And when I reflect that the record of a plain and simple declaration upon such an occasion as this, that the belief in witchcraft and possession is wicked nonsense, would have rendered the long agony of mediæval humanity impossible, I am prompted to reject, as dishonoring, the supposition that such declaration was withheld out of condescension to popular error.

"Come forth, thou unclean spirit, out of the man" (Mark v, 8),* are the words attributed to Jesus. If I declare, as I have no hesitation in doing, that I utterly disbelieve in the existence of "unclean

* Here, as always, the revised version is cited.

spirits," and, consequently, in the possibility of their "coming forth" out of a man, I suppose that Dr. Wace will tell me I am disregarding the "testimony of our Lord" (*loc. cit.* p. 255). For if these words were really used, the most resourceful of reconcilers can hardly venture to affirm that they are compatible with a disbelief in "these things." As the learned and fair-minded, as well as orthodox, Dr. Alexander remarks, in an editorial note to the article "Demoniacs," in the "Biblical Cyclopædia" (vol. i, p. 664, note):

... On the lowest grounds on which our Lord and his apostles can be placed, they must, at least, be regarded as *honest* men. Now, though honest speech does not require that words should be used always and only in their etymological sense, it does require that they should not be used so as to affirm what the speaker knows to be false. While, therefore, our Lord and his apostles might use the word *δαμονιζεσθαι*, or the phrase *δαμόνιον ἔχειν*, as a popular description of certain diseases, without giving in to the belief which lay at the source of such a mode of expression, they could not speak of demons entering into a man, or being cast out of him, without pledging themselves to the belief of an actual possession of the man by the demons (Campbell, "Prel. Diss.," vi, 1, 10). If, consequently, they did not hold this belief, they spoke not as honest men.

The story which we are considering does not rest on the authority of the second Gospel alone. The third confirms the second, especially in the matter of commanding the unclean spirit to come out of the man (Luke viii, 29); and, although the first Gospel either gives a different version of the same story, or tells another of like kind the essential point remains: "If thou cast us out, send us away into the herd of swine. And he said unto them, Go!" (Matthew viii, 31, 32).

If the concurrent testimony of the three synoptics, then, is really sufficient to do away with all rational doubt as to a matter of fact of the utmost practical and speculative importance—belief or disbelief in which may affect, and has affected, men's lives and their conduct toward other men in the most serious way—then I am bound to believe that Jesus implicitly affirmed himself to possess a "knowledge of the unseen world," which afforded full confirmation to the belief in demons and possession current among his contemporaries. If the story is true, the mediæval theory of the invisible world may be, and probably is, quite correct; and the witch-finders, from Sprenger to Hopkins and Mather, are much-maligned men.

On the other hand, humanity, noting the frightful consequences of this belief; common sense, observing the futility of the evidence on which it is based, in all cases that have been properly investigated; science, more and more seeing its way to inclose all the phenomena of so-called "possession" within the domain of pathology, so far as they are not to be relegated to that of the police—all these powerful influences concur in warning us, at our peril, against accepting the belief without the most careful scrutiny of the authority on which it rests.

I can discern no escape from this dilemma: either Jesus said what he is reported to have said, or he did not. In the former case, it is inevitable that his authority on matters connected with the "unseen world" should be roughly shaken; in the latter, the blow falls upon the authority of the synoptic gospels. If their report on a matter of such stupendous and far-reaching practical import as this is untrustworthy, how can we be sure of its trustworthiness in other cases? The favorite "earth," in which the hard-pressed reconciler takes refuge, that the Bible does not profess to teach science,* is stopped in

* Does any one really mean to say that there is any internal or external criterion by which the reader of a biblical statement, in which scientific matter is contained, is enabled to judge whether it is to be taken *au sérieux* or not? Is the account of the Deluge, accepted as true in the New Testament, less precise and specific than that of the call of Abraham, also accepted as true therein? By what mark does the story of the feeding with manna in the wilderness, which involves some very curious scientific problems, show that it is meant merely for edification, while the story of the

this instance. For the question of the existence of demons and of possession by them, though it lies strictly within the province of science, is also of the deepest moral and religious significance. If physical and mental disorders are caused by demons, Gregory of Tours and his contemporaries rightly considered that relics and exorcists were more useful than doctors; the gravest questions arise as to the legal and moral responsibilities of persons inspired by demoniacal impulses; and our whole conception of the universe and of our relations to it becomes totally different from what it would be on the contrary hypothesis.

The theory of life of an average mediæval Christian was as different from that of an average nineteenth-century Englishman as that of a West-African negro is now in these respects. The modern world is slowly, but surely, shaking off these and other monstrous survivals of savage delusions, and whatever happens, it will not return to that wallowing in the mire. Until the contrary is proved, I venture to doubt whether, at this present moment, any Protestant theologian, who has a reputation to lose, will say that he believes the Gadarene story.

The choice then lies between discrediting those who compiled the gospel biographies and disbelieving the Master, whom they, simple souls, thought to honor by preserving such traditions of the exercise of his authority over Satan's invisible world. This is the dilemma. No deep scholarship, nothing but a knowledge of the revised version (on which it is supposed all mere scholarship can do has been done), with the application thereto of the commonest canons of common sense, is needful to enable us to make a choice between its horns. It is hardly doubtful that the story, as told in the first Gospel, is merely a version of that told in the second and third. Nevertheless, the discrepancies are serious and irreconcilable; and, on this ground alone, a suspension of judgment, at the least, is called for. But there is a great deal more to be said. From the dawn of scientific biblical criticism until the present day the evidence against the long-cherished notion that the three synoptic gospels are the works of three independent authors, each prompted by divine inspiration, has steadily accumulated, until, at the present time, there is no visible escape from the conclusion that each of the three is a compilation consisting of a groundwork common to all three—the threefold tradition; and of a superstructure, consisting, firstly, of matter common to it with one of the others, and, secondly, of matter special to each. The use of the term "groundwork" and "superstructure" by no means implies that the latter must be of later date than the former. On the contrary, some parts of it may be, and probably are, older than some parts of the groundwork.*

The story of the Gadarene swine belongs to the groundwork; at least, the essential part of it, in which the belief in demoniac possession is expressed, does; and therefore the compilers of the first,

inscription of the law on stone by the hand of Jahveh is literally true? If the story of the Fall is not the true record of an historical occurrence, what becomes of Pauline theology? Yet the story of the Fall as directly conflicts with probability, and is as devoid of trustworthy evidence, as that of the Creation or that of the Deluge, with which it forms an harmoniously legendary series.

* See, for an admirable discussion of the whole subject, Dr. Abbott's article on the Gospels in the "Encyclopædia Britannica"; and the remarkable monograph by Prof. Volkmar, "Jesus Nazarenus und die erste Christliche Zeit" (1882). Whether we agree with the conclusions of these writers or not, the method of critical investigation which they adopt is unimpeachable.

second, and third Gospels, whoever they were, certainly accepted that belief (which, indeed, was universal among both Jews and pagans at that time), and attributed it to Jesus.

What, then, do we know about the originator, or originators, of this groundwork—of that threefold edition which all three witnesses (in Paley's phrase) agree upon—that we should allow their mere statements to outweigh the counter-arguments of humanity, of common sense, of exact science, and to imperil the respect which all would be glad to be able to render to their Master?

Absolutely nothing.* There is no proof, nothing more than a fair presumption, that any one of the Gospels existed, in the state in which we find it in the authorized version of the Bible, before the second century, or, in other words, sixty or seventy years after the events recorded. And, between that time and the date of the oldest extant manuscripts of the Gospels, there is no telling what additions and alterations and interpolations may have been made. It may be said that this is all mere speculation, but it is a good deal more. As competent scholars and honest men, our revisers have felt compelled to point out that such things have happened even since the date of the oldest known manuscripts. The oldest two copies of the second Gospel end with the eighth verse of the sixteenth chapter; the remaining twelve verses are spurious, and it is noteworthy that the maker of the addition has not hesitated to introduce a speech in which Jesus promises his disciples that "in my name shall they cast out devils."

The other passage "rejected to the margin" is still more instructive. It is that touching apologue, with its profound ethical sense, of the woman taken in adultery—which, if internal evidence were an infallible guide, might well be affirmed to be a typical example of the teachings of Jesus. Yet, say the revisers, pitilessly, "Most of the ancient authorities omit John vii, 53, viii, 11." Now, let any reasonable man ask himself this question: If, after an approximative settlement of the canon of the New Testament, and even later than the fourth and fifth centuries, literary fabricators had the skill and the audacity to make such additions and interpolations as these, what may they have done when no one had thought of a canon; when oral tradition, still unfixed, was regarded as more valuable than such written records as may have existed in the latter portion of the first century? Or, to take the other alternative, if those who gradually settled the canon did not know of the existence of the oldest codices which have come down to us; or if, knowing them, they rejected their authority, what is to be thought of their competency as critics of the text?

People who object to free criticism of the Christian Scriptures forget that they are what they are in virtue of very free criticism; unless the advocates of inspiration are prepared to affirm that the majority of influential ecclesiastics during several centuries were safeguarded against error. For, even granting that some books of the period were inspired, they were certainly few among many; and those who selected the canonical books, unless they themselves were also inspired, must be regarded in the light of mere critics, and, from the

* Notwithstanding the hard words shot at me from behind the hedge of anonymity by a writer in a recent number of the "Quarterly Review," I repeat, without the slightest fear of refutation, that the four Gospels, as they have come to us, are the work of unknown writers.

evidence they have left of their intellectual habits, very uncritical critics. When one thinks that such delicate questions as those involved fell into the hands of men like Papias (who believed in the famous millenarian grape story); of Iranæus with his "reasons" for the existence of only four Gospels; and of such calm and dispassionate judges as Tertullian, with his "*Credo quia impossibile*," the marvel is that the selection which constitutes our New Testament is as free as it is from obviously objectionable matter. The apocryphal Gospels certainly deserve to be apocryphal; but one may suspect that a little more critical discrimination would have enlarged the Apocrypha not inconsiderably.

At this point a very obvious objection arises, and deserves full and candid consideration. It may be said that critical skepticism carried to the length suggested is historical pyrrhonism; that if we are to altogether discredit an ancient or a modern historian, because he has assumed fabulous matter to be true, it will be as well to give up paying any attention to history. It may be said, and with great justice, that Eginhard's "Life of Charlemagne" is none the less trustworthy because of the astounding revelation of credulity, of lack of judgment, and even of respect for the eighth commandment, which he has unconsciously made in the "History of the Translation of the Blessed Martyrs Marcellinus and Paul." Or, to go no further back than the last number of this review, surely that excellent lady, Miss Strickland, is not to be refused all credence because of the myth about the second James's remains, which she seems to have unconsciously invented.

Of course this is perfectly true. I am afraid there is no man alive whose witness could be accepted, if the condition precedent were proof that he had never invented and promulgated a myth. In the minds of all of us there are little places here and there, like the indistinguishable spots on a rock which give foothold to moss or stone-crop; on which, if the germ of a myth fall, it is certain to grow, without in the least degree affecting our accuracy or truthfulness elsewhere. Sir Walter Scott knew that he could not repeat a story without, as he said, "giving it a new hat and stick." Most of us differ from Sir Walter only in not knowing about this tendency of the mythopœic faculty to break out unnoticed. But it is also perfectly true that the mythopœic faculty is not equally active on all minds, nor in all regions and under all conditions of the same mind. David Hume was certainly not so liable to temptation as the Venerable Bede, or even as some recent historians who could be mentioned; and the most imaginative of debtors, if he owes five pounds, never makes an obligation to pay a hundred out of it. The rule of common sense is *prima facie* to trust a witness in all matters in which neither his self-interest, his passions, his prejudices, nor that love of the marvellous which is inherent to a greater or less degree in all mankind, are strongly concerned; and, when they are involved, to require corroborative evidence in exact proportion to the contravention of probability by the thing testified.

Now, in the Gadarene affair, I do not think I am unreasonably skeptical if I say that the existence of demons who can be transferred from a man to a pig does thus contravene probability. Let me be perfectly candid. I admit I have no *a priori* objection to offer. There are physical things, such as *tæniæ* and *trichinæ*, which can be

transferred from men to pigs, and *vice versa*, and which do undoubtedly produce most diabolical and deadly effects on both. For anything I can absolutely prove to the contrary, there may be spiritual things capable of the same transmigration, with like effects. Moreover, I am bound to add that perfectly truthful persons, for whom I have the greatest respect, believe in stories about spirits of the present day, quite as improbable as that we are considering.

So I declare, as plainly as I can, that I am unable to show cause why these transferable devils should not exist, nor can I deny that, not merely the whole Roman Church, but many Wacean "infidels" of no mean repute, do honestly and firmly believe that the activity of such-like demonic beings is in full swing in this year of grace 1889.

Nevertheless, as good Bishop Butler says, "probability is the guide of life," and it seems to me that this is just one of the cases in which the canon of credibility and testimony, which I have ventured to lay down, has full force. So that, with the most entire respect for many (by no means for all) of our witnesses for the truth of demonology, ancient and modern, I conceive their evidence on this particular matter to be ridiculously insufficient to warrant their conclusion.*

After what has been said I do not think that any sensible man, unless he happen to be angry, will accuse me of "contradicting the Lord and his apostles" if I reiterate my total disbelief in the whole Gadarene story. But, if that story is discredited, all the other stories of demoniac possession fall under suspicion. And if the belief in demons and demoniac possession, which forms the somber background of the whole picture of primitive Christianity presented to us in the New Testament, is shaken, what is to be said, in any case, of the uncorroborated testimony of the Gospels with respect to the "unseen world"?

I am not aware that I have been influenced by any more bias in regard to the Gadarene story than I have been in dealing with other cases of like kind the investigation of which has interested me. I was brought up in the strictest school of evangelical orthodoxy; and, when I was old enough to think for myself, I started upon my journey of inquiry with little doubt about the general truth of what I had been taught; and with that feeling of the unpleasantness of being called an "infidel" which, we are told, is so right and proper. Near my journey's end, I find myself in a condition of something more than mere doubt about these matters.

In the course of other inquiries, I have had to do with fossil remains which looked quite plain at a distance, and became more and more indistinct as I tried to define their outline by close inspection. There was something there—something which, if I could win assurance about it, might mark a new epoch in the history of the earth; but, study as long as I might, certainty eluded my grasp. So has it been with me in my efforts to define the grand figure of Jesus as it

* Their arguments, in the long run, are always reducible to one form. Otherwise trustworthy witnesses affirm that such and such events took place. These events are inexplicable, except the agency of "spirits" is admitted. Therefore "spirits" were the cause of the phenomena.

And the heads of the reply are always the same. Remember Goethe's aphorism: "*Alles factische ist schon Theorie*." Trustworthy witnesses are constantly deceived, or deceive themselves, in their interpretation of sensible phenomena. No one can prove that the sensible phenomena, in these cases, could be caused only by the agency of spirits; and there is abundant ground for believing that they may be produced in other ways.

Therefore, the utmost that can be reasonably asked for, on the evidence as it stands, is suspension of judgment. And, on the necessity for even that suspension, reasonable men may differ, according to their views of probability.

lies in the primary strata of Christian literature. Is he the kindly, peaceful Christ depicted in the Catacombs? Or is he the stern judge who frowns above the altar of SS. Cosmas and Damianus? Or can he be rightly represented in the bleeding ascetic, broken down by physical pain, of too many mediæval pictures? Are we to accept the Jesus of the second, or the Jesus of the fourth Gospel, as the true Jesus? What did he really say and do; and how much that is attributed to him in speech and action is the embroidery of the various parties into which his followers tended to split themselves within twenty years of his death, when even the threefold tradition was only nascent?

If any one will answer these questions for me with something more to the point than feeble talk about the "cowardice of agnosticism," I shall be deeply his debtor. Unless and until they are satisfactorily answered, I say of agnosticism in this matter, "*J'y suis, et j'y reste.*"

But, as we have seen, it is asserted that I have no business to call myself an agnostic; that if I am not a Christian I am an infidel; and that I ought to call myself by that name of "unpleasant significance." Well, I do not care much what I am called by other people, and, if I had at my side all those who since the Christian era have been called infidels by other folks, I could not desire better company. If these are my ancestors, I prefer, with the old Frank, to be with them wherever they are. But there are several points in Dr. Wace's contention which must be eliminated before I can even think of undertaking to carry out his wishes. I must, for instance, know what a Christian is. Now what is a Christian? By whose authority is the signification of that term defined? Is there any doubt that the immediate followers of Jesus, the "sect of the Nazarenes," were strictly orthodox Jews, differing from other Jews not more than the Sadducees, the Pharisees, and the Essenes differed from one another; in fact, only in the belief that the Messiah, for whom the rest of their nation waited, had come? Was not their chief, "James, the brother of the Lord," revered alike by Sadducee, Pharisee, and Nazarene? At the famous conference which, according to the Acts, took place at Jerusalem, does not James declare that "myriads" of Jews, who, by that time had become Nazarenes, were "all zealous for the law"? Was not the name of "Christian" first used to denote the converts to the doctrine promulgated by Paul and Barnabas at Antioch? Does the subsequent history of Christianity leave any doubt that, from this time forth, the "little rift within the lute," caused by the new teaching developed, if not inaugurated, at Antioch, grew wider and wider, until the two types of doctrine irreconcilably diverged? Did not the primitive Nazarenism or Ebionism develop into the Nazarenism, and Ebionism, and Elkasaitism of later ages, and finally die out in obscurity and condemnation as damnable heresy; while the younger doctrine thrived and pushed out its shoots into that endless variety of sects, of which the three strongest survivors are the Roman and Greek Churches and modern Protestantism?

Singular state of things! If I were to profess the doctrine which was held by "James, the brother of the Lord," and by every one of the "myriads" of his followers and co-religionists in Jerusalem up to twenty or thirty years after the crucifixion (and one knows not how much later at Pella), I should be condemned with unanimity as an

ebionizing heretic by the Roman, Greek, and Protestant Churches! And, probably, this hearty and unanimous condemnation of the creed held by those who were in the closest personal relation with their Lord is almost the only point upon which they would be cordially of one mind. On the other hand—though I hardly dare imagine such a thing—I very much fear that the “pillars” of the primitive Hierosolymitan Church would have considered Dr. Wace an infidel. No one can read the famous second chapter of Galatians and the book of Revelation without seeing how narrow was even Paul’s escape from a similar fate. And, if ecclesiastical history is to be trusted, the thirty-nine articles, be they right or wrong, diverge from the primitive doctrine of the Nazarenes vastly more than even Pauline Christianity did.

But, further than this, I have great difficulty in assuring myself that even James, “the brother of the Lord,” and his “myriads” of Nazarenes, properly represented the doctrines of their Master. For it is constantly asserted by our modern “pillars” that one of the chief features of the work of Jesus was the instauration of religion by the abolition of what our sticklers for articles and liturgies, with unconscious humor, call the narrow restrictions of the law. Yet, if James knew this, how could the bitter controversy with Paul have arisen; and why did one or the other side not quote any of the various sayings of Jesus, recorded in the Gospels, which directly bear on the question—sometimes, apparently, in opposite directions?

So, if I am asked to call myself an “infidel,” I reply, To what doctrine do you ask me to be faithful? Is it that contained in the Nicene and the Athanasian Creeds? My firm belief is that the Nazarenes, say of the year 40, headed by James, would have stopped their ears and thought worthy of stoning the audacious man who propounded it to them. Is it contained in the so-called Apostles’ Creed? I am pretty sure that even that would have created a recalcitrant commotion at Pella in the year 70, among the Nazarenes of Jerusalem, who had fled from the soldiers of Titus. And yet if the unadulterated tradition of the teachings of “the Nazarene” were to be found anywhere, it surely should have been amid those not very aged disciples who may have heard them as they were delivered.

Therefore, however sorry I may be to be unable to demonstrate that, if necessary, I should not be afraid to call myself an “infidel,” I can not do it, even to gratify the Bishop of Peterborough and Dr. Wace. And I would appeal to the bishop, whose native sense of humor is not the least marked of his many excellent gifts and virtues, whether asking a man to call himself an “infidel” is not rather a droll request. “Infidel” is a term of reproach, which Christians and Mohammedans, in their modesty, agree to apply to those who differ from them. If he had only thought of it, Dr. Wace might have used the term “miscreant,” which, with the same etymological signification, has the advantage of being still more “unpleasant” to the persons to whom it is applied. But, in the name of all that is Hibernian, I ask the Bishop of Peterborough why should a man be expected to call himself a “miscreant” or an “infidel”? That St. Patrick “had two birth days because he was a twin” is a reasonable and intelligible utterance beside that of the man who should declare himself to be an infidel on the ground of denying his own belief. It may be logically,

if not ethically, defensible, that a Christian should call a Mohammedan an infidel, and *vice versa*; but, on Dr. Wace's principles, both ought to call themselves infidels, because each applies that term to the other.

Now I am afraid that all the Mohammedan world would agree in reciprocating that appellation to Dr. Wace himself. I once visited the Hazar Mosque, the great university of Mohammedanism, in Cairo, in ignorance of the fact that I was unprovided with proper authority. A swarm of angry undergraduates, as I suppose I ought to call them, came buzzing about me and my guide; and, if I had known Arabic, I suspect that "dog of an infidel" would have been by no means the most "unpleasant" of the epithets showered upon me, before I could explain and apologize for the mistake. If I had had the pleasure of Dr. Wace's company on that occasion, the indiscriminative followers of the Prophet would, I am afraid, have made no difference between us; not even if they had known that he was the head of an orthodox Christian seminary. And I have not the smallest doubt that even one of the learned mollahs, if his grave courtesy would have permitted him to say anything offensive to men of another mode of belief, would have told us that he wondered we did not find it "very unpleasant" to disbelieve in the Prophet of Islam.

From what precedes, I think it becomes sufficiently clear that Dr. Wace's account of the origin of the name of "Agnostic" is quite wrong. Indeed, I am bound to add that very slight effort to discover the truth would have convinced him that, as a matter of fact, the term arose otherwise. I am loath to go over an old story once more; but more than one object which I have in view will be served by telling it a little more fully than it has yet been told.

Looking back nearly fifty years, I see myself as a boy, whose education had been interrupted, and who, intellectually, was left, for some years, altogether to his own devices. At that time I was a voracious and omnivorous reader; a dreamer and speculator of the first water, well endowed with that splendid courage in attacking any and every subject which is the blessed compensation of youth and inexperience. Among the books and essays, on all sorts of topics from metaphysics to heraldry, which I read at this time, two left indelible impressions on my mind. One was Guizot's "History of Civilization," the other was Sir William Hamilton's essay "On the Philosophy of the Unconditioned," which I came upon, by chance, in an odd volume of the "Edinburgh Review." The latter was certainly strange reading for a boy, and I could not possibly have understood a great deal of it; * nevertheless, I devoured it with avidity, and it stamped upon my mind the strong conviction that, on even the most solemn and important of questions, men are apt to take cunning phrases for answers; and that the limitation of our faculties, in a great number of cases, renders real answers to such questions not merely actually impossible, but theoretically inconceivable.

Philosophy and history having laid hold of me in this eccentric fashion, have never loosened their grip. I have no pretension to be an expert in either subject; but the turn for philosophical and historical reading, which rendered Hamilton and Guizot attractive to me, has not only filled many lawful leisure hours, and still more

* Yet I must somehow have laid hold of the pith of the matter, for, many years afterward, when Dean Mansell's Bampton lectures were published, it seemed to me I already knew all that this eminently agnostic thinker had to tell me.

sleepless ones, with the repose of changed mental occupation, but has not unfrequently disputed my proper work-time with my liege lady, Natural Science. In this way I have found it possible to cover a good deal of ground in the territory of philosophy; and all the more easily that I have never cared much about A's or B's opinions, but have rather sought to know what answer he had to give to the questions I had to put to him—that of the limitation of possible knowledge being the chief. The ordinary examiner, with his “State the views of So-and-so,” would have floored me at any time. If he had said, “What do *you* think about any given problem?” I might have got on fairly well.

The reader who has had the patience to follow the enforced, but unwilling, egotism of this veritable history (especially if his studies have led him in the same direction), will now see why my mind steadily gravitated toward the conclusions of Hume and Kant, so well stated by the latter in a sentence, which I have quoted elsewhere:

“The greatest and perhaps the sole use of all philosophy of pure reason is, after all, merely negative, since it serves not as an organon for the enlargement [of knowledge], but as a discipline for its delimitation; and, instead of discovering truth, has only the modest merit of preventing error.”*

When I reached intellectual maturity and began to ask myself whether I was an atheist, a theist, or a pantheist; a materialist or an idealist; a Christian or a freethinker—I found that the more I learned and reflected, the less ready was the answer; until, at last, I came to the conclusion that I had neither art nor part with any of these denominations, except the last. The one thing in which most of these good people were agreed was the one thing in which I differed from them. They were quite sure they had attained a certain “gnosis”—had, more or less successfully, solved the problem of existence; while I was quite sure I had not, and had a pretty strong conviction that the problem was insoluble. And, with Hume and Kant on my side, I could not think myself presumptuous in holding fast by that opinion. Like Dante—

“Nel mezzo del cammìn di nostra vita
Mi ritrovai per una selva oscura,”†

but, unlike Dante, I can not add—

“Che la diritta via era smarrita.”‡

On the contrary, I had, and have, the firmest conviction that I never left the “*verace via*”—the straight road; and that this road led nowhere else but into the dark depths of a wild and tangled forest. And though I have found leopards and lions in the path; though I have made abundant acquaintance with the hungry wolf, that with “privy paw devours apace and nothing said,” as another great poet says of the ravening beast; and though no friendly specter has even yet offered his guidance, I was, and am, minded to go straight on, until I either come out on the other side of the wood, or find there is no other side to it—at least, none attainable by me.

This was my situation when I had the good fortune to find a place among the members of that remarkable confraternity of antagonists,

* “Kritik der reinen Vernunft.” Edit. Hartenstein, p. 256.

† [In the midway of this our mortal life
I found me in a gloomy wood astray.]

‡ [Gone from the path direct.]

represented there, and expressed itself with entire openness; most of my colleagues were *ists* of one sort or another; and, however kind and friendly they might be, I, the man without a rag of a label to cover himself with, could not fail to have some of the uneasy feelings which must have beset the historical fox when, after leaving the trap in which his tail remained, he presented himself to his normally elongated companions. So I took thought, and invented what I conceived to be the appropriate title of "agnostic." It came into my head as suggestively antithetic to the "gnostic" of Church history, who professed to know so much about the very things of which I was ignorant; and I took the earliest opportunity of parading it at our society, to show that I, too, had a tail, like the other foxes. To my great satisfaction, the term took; and when the "Spectator" had stood godfather to it, any suspicion in the minds of respectable people that a knowledge of its parentage might have awakened, was, of course, completely lulled.

That is the history of the origin of the terms "agnostic" and "agnosticism"; and it will be observed that it does not quite agree with the confident assertion of the reverend Principal of King's College, that "the adoption of the term agnostic is only an attempt to shift the issue, and that it involves a mere evasion" in relation to the Church and Christianity.*

The last objection (I rejoice, as much as my readers must do, that it is the last) which I have to take to Dr. Wace's deliverance before the the Church Congress arises, I am sorry to say, on a question of morality.

"It is, and it ought to be," authoritatively declares this official representative of Christian ethics, "an unpleasant thing for a man to have to say plainly that he does not believe in Jesus Christ" (*l. c.*, p. 254).

Whether it is so, depends, I imagine, a good deal on whether the man was brought up in a Christian household or not. I do not see why it should be "unpleasant" for a Mohammedan or a Buddhist to say so. But that "it ought to be" unpleasant for any man to say anything which he sincerely, and after due deliberation, believes, is, to my mind, a proposition of the most profoundly immoral character. I verily believe that the great good which has been effected in the world by Christianity has been largely counteracted by the pestilent doctrine on which all the churches have insisted, that honest disbelief in their more or less astonishing creeds is a moral offense, indeed a sin of the deepest dye, deserving and involving the same future retribution as murder and robbery. If we could only see, in one view, the torrents of hypocrisy and cruelty, the lies, the slaughter, the violations of every obligation of humanity, which have flowed from this source along the course of the history of Christian nations, our worst imaginations of hell would pale beside the vision.

A thousand times, no! It ought *not* to be unpleasant to say that which one honestly believes or disbelieves. That it so constantly is painful to do so, is quite enough obstacle to the progress of mankind in that most valuable of all qualities, honesty of word or of deed, without erecting a sad concomitant of human weakness into something to be admired and cherished. The bravest of soldiers often, and very naturally, "feel it unpleasant" to go into action; but a court-martial

which did its duty would make short work of the officer who promulgated the doctrine that his men *ought* to feel their duty unpleasant.

I am very well aware, as I suppose most thoughtful people are in these times, that the process of breaking away from old beliefs is extremely unpleasant; and I am much disposed to think that the encouragement, the consolation, and the peace afforded to earnest believers in even the worst forms of Christianity are of great practical advantage to them. What deductions must be made from this gain on the score of the harm done to the citizen by the ascetic other-worldliness of logical Christianity; to the ruler, by the hatred, malice, and all uncharitableness of sectarian bigotry; to the legislator, by the spirit of exclusiveness and domination of those that count themselves pillars of orthodoxy; to the philosopher, by the restraints on the freedom of learning and teaching which every church exercises, when it is strong enough; to the conscientious soul, by the introspective hunting after sins of the mint and cummin type, the fear of theological error, and the overpowering terror of possible damnation, which have accompanied the churches like their shadow, I need not now consider; but they are assuredly not small. If agnostics lose heavily on the one side, they gain a good deal on the other. People who talk about the comforts of belief appear to forget its discomforts; they ignore the fact that the Christianity of the churches is something more than faith in the ideal personality of Jesus, which they create for themselves, *plus* so much as can be carried into practice, without disorganizing civil society, of the maxims of the Sermon on the Mount. Trip in morals or in doctrine (especially in doctrine), without due repentance or retraction, or fail to get properly baptized before you die, and a *plébiscite* of the Christians of Europe, if they were true to their creeds, would affirm your everlasting damnation by an immense majority.

Preachers, orthodox and heterodox, din into our ears that the world can not get on without faith of some sort. There is a sense in which that is as eminently as obviously true; there is another, in which, in my judgment, it is as eminently as obviously false, and it seems to me that the hortatory, or pulpit, mind is apt to oscillate between the false and the true meanings, without being aware of the fact.

It is quite true that the ground of every one of our actions, and the validity of all our reasonings, rest upon the great act of faith, which leads us to take the experience of the past as a safe guide in our dealings with the present and the future. From the nature of ratiocination it is obvious that the axioms on which it is based can not be demonstrated by ratiocination. It is also a trite observation that, in the business of life, we constantly take the most serious action upon evidence of an utterly insufficient character. But it is surely plain that faith is not necessarily entitled to dispense with ratiocination because ratiocination can not dispense with faith as a starting-point; and that because we are often obliged, by the pressure of events, to act on very bad evidence, it does not follow that it is proper to act on such evidence when the pressure is absent.

The writer of the epistle to the Hebrews tells us that "faith is the assurance of things hoped for, the proving of things not seen." In the authorized version "substance" stands for "assurance," and "evi-

dence" for "the proving." The question of the exact meaning of the two words, *ὑπόστασις* and *ἐλεγχος*, affords a fine field of discussion for the scholar and the metaphysician. But I fancy we shall be not far from the mark if we take the writer to have had in his mind the profound psychological truth that men constantly feel certain about things for which they strongly hope, but have no evidence, in the legal or logical sense of the word; and he calls this feeling "faith," I may have the most absolute faith that a friend has not committed the crime of which he is accused. In the early days of English history, if my friend could have obtained a few more compurgators of like robust faith, he would have been acquitted. At the present day, if I tendered myself as a witness on that score, the judge would tell me to stand down, and the youngest barrister would smile at my simplicity. Miserable indeed is the man who has not such faith in some of his fellow men—only less miserable than the man who allows himself to forget that such faith is not, strictly speaking, evidence; and when his faith is disappointed, as will happen now and again, turns Timon and blames the universe for his own blunders. And so, if a man can find a friend, the hypostasis of all his hopes, the mirror of his ethical ideal, in the Jesus of any, or all, of the Gospels, let him live by faith in that ideal. Who shall or can forbid him? But let him not delude himself with the notion that his faith is evidence of the objective reality of that in which he trusts. Such evidence is to be obtained only by the use of the methods of science, as applied to history and to literature, and it amounts at present to very little.

It appears that Mr. Gladstone, some time ago, asked Mr. Laing if he could draw up a short summary of the negative creed; a body of negative propositions, which have so far been adopted on the negative side as to be what the Apostles' and other accepted creeds are on the positive; and Mr. Laing at once kindly obliged Mr. Gladstone with the desired articles—eight of them.

If any one had preferred this request to me, I should have replied that, if he referred to agnostics, they have no creed; and, by the nature of the case, can not have any. Agnosticism, in fact, is not a creed, but a method, the essence of which lies in the rigorous application of a single principle. That principle is of great antiquity; it is as old as Socrates; as old as the writer who said, "Try all things, hold fast by that which is good"; it is the foundation of the Reformation, which simply illustrated the axiom that every man should be able to give a reason for the faith that is in him; it is the great principle of Descartes; it is the fundamental axiom of modern science. Positively the principle may be expressed: In matters of the intellect, follow your reason as far as it will take you, without regard to any other consideration. And negatively: In matters of the intellect, do not pretend that conclusions are certain which are not demonstrated or demonstrable. That I take to be the agnostic faith, which if a man keep whole and undefiled, he shall not be ashamed to look the universe in the face, whatever the future may have in store for him.

The results of the working out of the agnostic principle will vary according to individual knowledge and capacity, and according to the general condition of science. That which is unproved to-day may be proved, by the help of new discoveries, to-morrow. The only negative fixed points will be those negations which flow from the demon-

strable limitation of our faculties. And the only obligation accepted is to have the mind always open to conviction. Agnostics who never fail in carrying out their principles are, I am afraid, as rare as other people of whom the same consistency can be truthfully predicted. But, if you were to meet with such a phoenix and to tell him that you had discovered that two and two make five, he would patiently ask you to state your reasons for that conviction, and express his readiness to agree with you if he found them satisfactory. The apostolic injunction to "suffer fools gladly," should be the rule of life of a true agnostic. I am deeply conscious how far I myself fall short of this ideal, but it is my personal conception of what agnostics ought to be.

However, as I began by stating, I speak only for myself; and I do not dream of anathematizing and excommunicating Mr Laing. But, when I consider his creed and compare it with the Athanasian, I think I have, on the whole, a clearer conception of the meaning of the latter. "Polarity" in Article viii, for example, is a word about which I heard a good deal in my youth, when "*Naturphilosophie*" was in fashion, and greatly did I suffer from it. For many years past, whenever I have met with "polarity" anywhere but in a discussion of some purely physical topic, such as magnetism, I have shut the book. Mr. Laing must excuse me if the force of habit was too much for me when I read his eighth article.

And now, what is to be said to Mr. Harrison's remarkable deliverance "*On the future of agnosticism*"? * I would that it were not my business to say anything, for I am afraid that I can say nothing which shall manifest my great personal respect for this able writer, and for the zeal and energy with which he ever and anon galvanizes the weakly frame of positivism until it looks more than ever like John Bunyan's Pope and Pagan rolled into one. There is a story often repeated, and I am afraid none the less mythical on that account, of a valiant and loud-voiced corporal, in command of two full privates, who falling in with a regiment of the enemy in the dark, orders it to surrender under pain of instant annihilation by his force; and the enemy surrenders accordingly. I am always reminded of this tale when I read the positivist commands to the forces of Christianity and of Science; only the enemy show no more signs of intending to obey now than they have done any time these forty years.

The allocution under consideration has the papal flavor which is wont to hang about the utterances of the pontiffs of the Church of Comte. Mr. Harrison speaks with authority, and not as one of the common scribes of the period. He knows not only what agnosticism is and how it has come about, but what will become of it. The agnostic is to content himself with being the precursor of the positivist. In his place, as a sort of navy leveling the ground and cleansing it of such poor stuff as Christianity, he is a useful creature who deserves patting on the back, on condition that he does not venture beyond his last. But let not these scientific Sanballats presume that they are good enough to take part in the building of the temple—they are mere Samaritans, doomed to die out in proportion as the Religion of Humanity is accepted by mankind. Well, if that is their fate, they have time to be cheerful. But let us hear Mr. Harrison's pronouncement of their doom:

* "*Fortnightly Review*," January, 1889.

"Agnosticism is a stage in the evolution of religion, an entirely negative stage, the point reached by physicists, a purely mental conclusion, with no relation to things social at all" (p. 154). I am quite dazed by this declaration. Are there, then, any "conclusions" that are not "purely mental"? Is there "no relation to things social" in "mental conclusions" which affect men's whole conception of life? Was that prince of agnostics, David Hume, particularly imbued with physical science? Supposing physical science to be non-existent would not the agnostic principle, applied by the philologist and the historian, lead to exactly the same results? Is the modern more or less complete suspension of judgment as to the facts of the history of regal Rome, or the real origin of the Homeric poems, anything but agnosticism in history and in literature? And if so, how can agnosticism be the "mere negation of the physicist"?

"Agnosticism is a stage in the evolution of religion." No two people agree as to what is meant by the term "religion"; but if it means, as I think it ought to mean, simply the reverence and love for the ethical ideal, and the desire to realize that ideal in life, which every man ought to feel—then I say agnosticism has no more to do with it than it has to do with music or painting. If, on the other hand, Mr. Harrison, like most people, means by "religion" theology, then, in my judgement, agnosticism can be said to be a stage in its evolution, only as death may be said to be the final stage in the evolution of life.

When agnostic logic is simply one of the canons of thought, agnosticism, as a distinctive faith will have spontaneously disappeared (p. 155).

I can but marvel that such sentences as this, and those already quoted, should have proceeded from Mr. Harrison's pen. Does he really mean to suggest that agnostics have a logic peculiar to themselves? Will he kindly help me out of my bewilderment when I try to think of "logic" being anything else than the canon (which, I believe means rule) of thought? As to agnosticism being a distinctive faith, I have already shown that it can not possibly be anything of the kind; unless perfect faith in logic is distinctive of agnostics, which, after all, it may be.

Agnosticism as a religious philosophy *per se* rests on an almost total ignoring of history and social evolution (p. 152).

But neither *per se* nor *per aliud* has agnosticism (if I know anything about it) the least pretension to be a religious philosophy; so far from resting on ignorance of history, and that social evolution of which history is the account, it is and has been the inevitable result of the strict adherence to scientific methods by historical investigators. Our forefathers were quite confident about the existence of Romulus and Remus, of King Arthur, and of Hengst and Horsa. Most of us have become agnostics in regard to the reality of these worthies. It is a matter of notoriety, of which Mr. Harrison, who accuses us all so freely of ignoring history, should not be ignorant, that the critical process which has shattered the foundations of orthodox Christian doctrines owes its origin, not to the devotees of physical science, but, before all, to Richard Simon, the learned French Oratorian, just two hundred years ago. I can not find evidence that either Simon, or any one of the great scholars and critics of the eighteenth and nineteenth centuries who have continued Simon's work, had any particular acquaintance with physical science. I have already pointed out that

Hume was independent of it. And certainly one of the most potent influences in the same direction, upon history in the present century, that of Grote, did not come from the physical side. Physical science, in fact, has had nothing directly to do with the criticism of the Gospels; it is wholly incompetent to furnish demonstrative evidence that any statement made in these histories is untrue. Indeed, modern physiology can find parallels in nature for events of apparently the most eminently supernatural kind recounted in some of those histories.

It is a comfort to hear, upon Mr. Harrison's authority, that the laws of physical nature show no signs of becoming "less definite, less consistent, or less popular as time goes on" (p. 154). How a law of nature is to become indefinite, or "inconsistent," passes my poor powers of imagination. But with universal suffrage and the coach-dog theory of premiership in full view; the theory, I mean, that the whole duty of a political chief is too look sharp for the way the social coach is driving, and then run in front and bark loud—as if being the leading noise-maker and guiding were the same things—it is truly satisfactory to me to know that the laws of nature are increasing in popularity. Looking at recent developments of the policy which is said to express the great heart of the people, I have had my doubts of the fact; and my love for my fellow-countrymen has led me to reflect with dread on what will happen to them, if any of the laws of nature ever become so unpopular in their eyes as to be voted down by the transcendent authority of universal suffrage. If the legion of demons, before they set out on their journey in the swine, had had time to hold a meeting and to resolve unanimously, "That the law of gravitation is oppressive and ought to be repealed," I am afraid it would have made no sort of difference to the result, when their two thousand unwilling porters were once launched down the steep slopes of the fatal shore of Gennesaret.

The question of the place of religion as an element of human nature, as a force of human society, its origin, analysis, and functions, has never been considered at all from an agnostic point of view (p. 152).

I doubt not that Mr. Harrison knows vastly more about history than I do; in fact, he tells the public that some of my friends and I have had no opportunity of occupying ourselves with that subject. I do not like to contradict any statement which Mr. Harrison makes on his own authority; only, if I may be true to my agnostic principles, I humbly ask how he has obtained assurance on this head. I do not profess to know anything about the range of Mr. Harrison's studies; but as he has thought it fitting to start the subject, I may venture to point out that, on the evidence adduced, it might be equally permissible to draw the conclusion that Mr. Harrison's absorbing labors as the *pontifex maximus* of the positivist religion have not allowed him to acquire that acquaintance with the methods and results of physical science, or with the history of philosophy, or of philological and historical criticism, which is essential to any one who desires to obtain a right understanding of agnosticism. Incompetence in philosophy, and in all branches of science except mathematics, is the well-known mental characteristic of the founder of Positivism. Faithfulness in disciples is an admirable quality in itself; the pity is that it not unfrequently leads to the imitation of the weaknesses as well as of the strength of the master. It is only such over-faithfulness which can

account for a "strong mind really saturated with the historical sense" (p. 153) exhibiting the extraordinary forgetfulness of the historical fact of the existence of David Hume implied by the assertion that

it would be difficult to name a single known agnostic who has given to history anything like the amount of thought and study which he brings to a knowledge of the physical world (p. 153).

Whoso calls to mind, what I may venture to term, the bright side of Christianity; that ideal of manhood, with its strength and its patience; its justice and its pity for human frailty; its helpfulness, to the extremity of self-sacrifice; its ethical purity and nobility; which apostles have pictured, in which armies of martyrs have placed their unshakable faith, and whence obscure men and women, like Catherine of Sienna and John Knox, have derived the courage to rebuke popes and kings, is not likely to underrate the importance of the Christian faith as a factor in human history, or to doubt that if that faith should prove to be incompatible with our knowledge, or necessary want of knowledge, some other hypostasis of men's hopes, genuine enough and worthy enough to replace it, will arise. But that the incongruous mixture of bad science with eviscerated papistry, out of which Comte manufactured the positivist religion, will be the heir of the Christian ages, I have too much respect for the humanity of the future to believe. Charles II told his brother, "They will not kill me, James, to make you king." And if critical science is remorselessly destroying the historical foundations of the noblest ideal of humanity which mankind have yet worshiped, it is little likely to permit the pitiful reality to climb into the vacant shrine.

That a man should determine to devote himself to the service of humanity—including intellectual and moral self-culture under that name; that this should be, in the proper sense of the word, his religion—is not only an intelligible, but, I think, a laudable resolution. And I am greatly disposed to believe that it is the only religion which will prove itself to be unassailably acceptable so long as the human race endures. But when the positivist asks me to worship "Humanity"—that is to say, to adore the generalized conception of men as they ever have been and probably ever will be—I must reply that I could just as soon bow down and worship the generalized conception of a "wilderness of apes." Surely we are not going back to the days of paganism, when individual men were deified, and the hard good sense of a dying Vespasian could prompt the bitter jest, "*Ut puto Deus fio.*" No divinity doth hedge a modern man, be he even a sovereign ruler. Nor is there any one, except a municipal magistrate, who is officially declared worshipful. But if there is no spark of worship-worthy divinity in the individual twigs of humanity, whence comes that godlike splendor which the Moses of positivism fondly imagines to pervade the whole bush?

I know no study which is so unutterably saddening as that of the evolution of humanity, as it is set forth in the annals of history. Out of the darkness of prehistoric ages man emerges with the marks of his lowly origin strong upon him. He is a brute, only more intelligent than the other brutes; a blind prey to impulses, which as often as not lead him to destruction; a victim to endless illusions, which make his mental existence a terror and a burden, and fill his physical life with barren toil and battle. He attains a certain degree of physical comfort, and develops a more or less workable theory of life, in such

favorable situations as the plains of Mesopotamia or of Egypt and then, for thousands and thousands of years, struggles with varying fortunes, attended by infinite wickedness, bloodshed, and misery, to maintain himself at this point against the greed and the ambition of his fellow-men. He makes a point of killing and otherwise persecuting all those who first try to get him to move on; and when he has moved on a step, foolishly confers *post-mortem* deification on his victims. He exactly repeats the process with all who want to move a step yet farther. And the best men of the best epochs are simply those who make the fewest blunders and commit the fewest sins.

That one should rejoice in the good man; forgive the bad man; and pity and help all men to the best of one's ability, is surely indisputable. It is the glory of Judaism and of Christianity to have proclaimed this truth, through all their aberrations. But the worship of a God who needs forgiveness and help, and deserves pity every hour of his existence, is no better than that of any other voluntarily selected fetich. The Emperor Julian's project was hopeful, in comparison with the prospects of the new anthropolatry.

When the historian of religion in the twentieth century is writing about the nineteenth, I foresee he will say something of this kind:

The most curious and instructive events in the religious history of the preceding century are the rise and progress of two new sects, called Mormons and Positivists. To the student who has carefully considered these remarkable phenomena nothing in the records of religious self-delusion can appear improbable.

The Mormons arose in the midst of the great Republic, which, though comparatively insignificant at that time, in territory as in the number of its citizens, was (as we know from the fragments of the speeches of its orators which have come down to us) no less remarkable for the native intelligence of its population, than for the wide extent of their information, owing to the activity of their publishers in diffusing all that they could invent, beg, borrow, or steal. Nor were they less noted for their perfect freedom from all restraints in thought or speech or deed; except, to be sure, the beneficent and wise influence of the majority exerted, in case of need, through an institution known as "tarring and feathering," the exact nature of which is now disputed.

There is a complete consensus of testimony that the founder of Mormonism, one Joseph Smith, was a low-minded, ignorant scamp, and that he stole the "Scriptures," which he propounded; not being clever enough to forge even such contemptible stuff as they contain. Nevertheless he must have been a man of some force of character, for a considerable number of disciples soon gathered about him. In spite of repeated outbursts of popular hatred and violence—during one of which persecutions, Smith was brutally murdered—the Mormon body steadily increased, and became a flourishing community. But the Mormon practices being objectionable to the majority, they were, more than once, without any pretense of law, but by force of riot, arson, and murder, driven away from the land they had occupied. Harried by these persecutions, the Mormon body eventually committed itself to the tender mercies of a desert as barren as that of Sinai; and, after terrible sufferings and privations, reached the oasis of Utah. Here it grew and flourished, sending out missionaries

to, and receiving converts from, all parts of Europe, sometimes to the number of 10,000 in a year; until in 1880, the rich and flourishing community numbered 110,000 souls in Utah alone, while there were probably 30,000 or 40,000 scattered abroad elsewhere. In the whole history of religions there is no more remarkable example of the power of faith; and, in this case, the founder of that faith was indubitably a most despicable creature. It is interesting to observe that the course taken by the great Republic and its citizens runs exactly parallel with that taken by the Roman Empire and its citizens toward the early Christians, except that the Romans had a certain legal excuse for their acts of violence, inasmuch as the Christian "sodalities" were not licensed, and consequently were, *ipso facto*, illegal assemblages. Until, in the latter part of the nineteenth century, the United States Legislature decreed the illegality of polygamy, the Mormons were wholly within the law.

Nothing can present a greater contrast to all this than the history of the Positivists. This sect arose much about the same time as that of the Mormons, in the upper and most instructed stratum of the quick-witted, skeptical population of Paris. The founder, Auguste Comte, was a teacher of mathematics, but of no eminence in that department of knowledge, and with nothing but an amateur's acquaintance with physical, chemical, and biological science. His works are repulsive on account of the dull diffuseness of their style, and a certain air, as of a superior person, which characterizes them; but, nevertheless, they contain good things here and there. It would take too much space to reproduce in detail a system which proposes to regulate all human life by the promulgation of a gentile Leviticus. Suffice it to say that M. Comte may be described as a syncretic, who, like the gnostics of early Church history, attempted to combine the substance of imperfectly comprehended contemporary science with the form of Roman Christianity. It may be that this is the reason why his disciples were so very angry with some obscure people called Agnostics, whose views, if we may judge by the accounts left in the works of a great positivist controversial writer, were very absurd.

To put the matter briefly, M. Comte, finding Christianity and Science at daggers drawn, seems to have said to Science: "You find Christianity rotten at the core, do you? Well, I will scoop out the inside of it." And to Romanism: "You find Science mere dry light—cold and bare. Well, I will put your shell over it, and so, as school-boys make a specter out of a turnip and a tallow candle, behold the new religion of Humanity complete!"

Unfortunately, neither the Romanists nor the people who were something more than amateurs in science could be got to worship M. Comte's new idol properly. In the native country of Positivism, one distinguished man of letters and one of science, for a time, helped to make up a roomful of the faithful, but their love soon grew cold. In England, on the other hand, there appears to be little doubt that, in the ninth decade of the century, the multitude of disciples reached the grand total of several score. They had the advantage of the advocacy of one or two most eloquent and learned apostles, and, at any rate, the sympathy of several persons of light and leading—and, if they were not seen, they were heard all over the world. On the other hand, as a sect, they labored under the prodigious disadvantage of

being refined, estimable people, living in the midst of the worn-out civilization of the Old World; where any one who had tried to persecute them, as the Mormons were persecuted, would have been instantly hanged. But the majority never dreamed of persecuting them; on the contrary, they were rather given to scold, and otherwise try the patience of the majority.

The history of these sects in the closing years of the century is highly instructive. Mormonism

But I find I have suddenly slipped off Mr. Harrison's tripod, which I had borrowed for the occasion. The fact is, I am not equal to the prophetic business, and ought not to have undertaken it.

III.

AGNOSTICISM.

A REPLY TO PROFESSOR HUXLEY.

By HENRY WACE, D. D.

It would hardly be reasonable to complain of Prof. Huxley's delay in replying to the paper on "Agnosticism" which I read five months ago, when, at the urgent request of an old friend, I reluctantly consented to address the Church Congress at Manchester. I am obliged to him for doing it the honor to bring it to the notice of a wider circle than that to which it was directly addressed; and I fear that, for reasons which have been the occasion of universal regret, he may not have been equal to literary effort. But, at the same time, it is impossible not to notice that a writer is at a great advantage in attacking a fugitive essay a quarter of a year after it was made public. Such a lapse of time ought, indeed, to enable him to apprehend distinctly the argument with which he is dealing; and it might, at least, secure him from any such inaccuracy in quotation as greater haste might excuse. But if either his idiosyncrasy, or his sense of assured superiority, should lead him to pay no real attention to the argument he is attacking, or should betray him into material misquotation, he may at least be sure that scarcely any of his readers will care to refer to the original paper, or will have the opportunity of doing so. I can scarcely hope that Prof. Huxley's obliging reference to the "Official Report of the Church Congress" will induce many of those who are influenced by his answer to my paper to purchase that interesting volume, though they would be well repaid by some of its other contents; and I can hardly rely on their spending even twopence upon the reprint of the paper, published by the Society for Promoting Christian Knowledge. I have therefore felt obliged to ask the editor of this review to be kind enough to admit to his pages a brief restatement of the position which Prof. Huxley has assailed, with such notice of his arguments as is practicable within the comparatively brief space which can be afforded me. I could not, indeed, amid the pressing claims of a college like this in term time, besides the chairmanship of a hospital, a preaching, and other duties, attempt any reply which would deal as thoroughly as could be wished with an article of so much skill and finish. But it is a matter of justice to my cause and to myself to

remove at once the unscientific and prejudiced representation of the case which Prof. Huxley has put forward; and fortunately there will be need of no elaborate argument for this purpose. There is no occasion to go beyond Prof. Huxley's own article and the language of my paper to exhibit his entire misapprehension of the point in dispute; while I am much more than content to rely for the invalidation of his own contentions upon the authorities he himself quotes.

What, then, is the position with which Prof. Huxley finds fault? He is good enough to say that what he calls my "description" of an agnostic may for the present pass, so that we are so far, at starting, on common ground. The actual description of an agnostic, which is given in my paper, is indeed distinct from the words he quotes, and is taken from an authoritative source. But what I have said is that, as an escape from such an article of Christian belief as that we have a Father in heaven, or that Jesus Christ is the Judge of quick and dead, and will hereafter return to judge the world, an agnostic urges that "he has no means of a scientific knowledge of the unseen world or of the future"; and I maintain that this plea is irrelevant. Christians do not presume to say that they have a scientific knowledge of such articles of their creed. They say that they believe them, and they believe them mainly on the assurances of Jesus Christ. Consequently their characteristic difference from an agnostic consists in the fact that they believe those assurances, and that he does not. Prof. Huxley's observation, "Are there then any Christians who say that they know nothing about the unseen world and the future? I was ignorant of the fact, but I am ready to accept it on the authority of a professed theologian," is either a quibble, or one of many indications that he does not recognize the point at issue. I am speaking, as the sentence shows, of scientific knowledge—knowledge which can be obtained by our own reason and observation alone—and no one with Prof. Huxley's learning is justified in being ignorant that it is not upon such knowledge, but upon supernatural revelation, that Christian belief rests. However, as he goes on to say, my view of "the real state of the case is that the agnostic 'does not believe the authority' on which 'these things' are stated, which authority is Jesus Christ. He is simply an old-fashioned 'infidel' who is afraid to own to his right name." The argument has nothing to do with the motive, whether it is being afraid or not. It only concerns the fact that that by which he is distinctively separated from the Christian is that he does not believe the assurances of Jesus Christ.

Prof. Huxley thinks there is "an attractive simplicity about this solution of the problem"—he means, of course, this statement of the case—"and it has that advantage of being somewhat offensive to the persons attacked, which is so dear to the less refined sort of controversialist." I think Prof. Huxley must have forgotten himself and his own feelings in this observation. There can be no question, of course, of his belonging himself to the more refined sort of controversialist; but he has a characteristic fancy for solutions of problems, or statements of cases, which have the "advantage of being somewhat offensive to the persons attacked." Without taking this particular phrase into account, it certainly has "the advantage of being offensive to the persons attacked" that Prof. Huxley should speak in this article of "the pestilent doctrine on which all the churches have insisted, the honest

disbelief"—the word honest is not a misquotation—"honest disbelief in their more or less astonishing creeds is a moral offense, indeed a sin of the deepest dye, deserving and involving the same future retribution as murder or robbery," or that he should say, "Trip in morals or in doctrine (especially in doctrine), without due repentance or retraction, or fail to get properly baptized before you die, and a *plébiscite* of the Christians of Europe, if they were true to their creeds, would affirm your everlasting damnation by an immense majority." We have fortunately nothing to do in this argument with *plébiscites*; and as statements of authoritative Christian teaching, the least that can be said of these allegations is that they are offensive exaggerations. It had "the advantage" again of being "offensive to the persons attacked." when Prof. Huxley, in an article in this review on "Science and the Bishops," in November, 1887, said that "scientific ethics can and does declare that the profession of belief" in such narratives as that of the devils entering a herd of swine, or of the fig-tree that was blasted for bearing no figs, upon the evidence on which multitudes of Christians believe it, "is immoral"; and the observation which followed, that "theological apologists would do well to consider the fact that, in the matter of intellectual veracity, Science is already a long way ahead of the churches," has the same "advantage." I repeat that I can not but treat Prof. Huxley as an example of the more refined sort of controversialist: it must be supposed, therefore, that when he speaks of observations or insinuations which are somewhat offensive to the "persons attacked" being dear to the other sort of controversialist, he is unconscious of his own methods of controversy—or, shall I say, his own temptations?

But I desire as far as possible to avoid any rivalry with Prof. Huxley in these refinements—more or less—of controversy; and am, in fact, forced by pressure both of space and of time to keep as rigidly as possible to the points directly at issue. He proceeds to restate the case as follows: "The agnostic says, 'I can not find good evidence that so and so is true.' 'Ah,' says his adversary, seizing his opportunity, 'then you declare that Jesus Christ was untruthful, for he said so and so'—a very telling method of rousing prejudice." Now that superior scientific veracity to which, as we have seen, Prof. Huxley lays claim, should have prevented him putting such vulgar words into my mouth. There is not a word in my paper to charge agnostics with declaring that Jesus Christ was "untruthful." I believe it impossible in these days for any man who claims attention—I might say, for any man—to declare our Lord untruthful. What I said, and what I repeat, is that the position of an agnostic involves the conclusion that Jesus Christ was under an "illusion" in respect to the deepest beliefs of his life and teaching. The words of my paper are, "An agnosticism which knows nothing of the relation of man to God must not only refuse belief to our Lord's most undoubted teaching, but must deny the reality of the spiritual convictions in which he lived and died." The point is this—that there can, at least, be no reasonable doubt that Jesus Christ lived, and taught, and died, in the belief of certain great principles respecting the existence of God, our relation to God, and his own relation to us, which an agnostic says are beyond the possibilities of human knowledge; and of course an agnostic regards Jesus Christ as a man. If so, he must necessarily regard Jesus Christ as

mistaken, since the notion of his being untruthful is a supposition which I could not conceive being suggested. The question I have put is not, as Prof. Huxley represents, what is the most unpleasant alternative to belief in the primary truths of the Christian religion, but what is the least unpleasant; and all I have maintained is that the least unpleasant alternative necessarily involved is, that Jesus Christ was under an illusion in his most vital convictions.

I content myself with thus rectifying the state of the case, without making the comments which I think would be justified on such a crude misrepresentation of my argument. But Prof. Huxley goes on to observe that "the value of the evidence as to what Jesus may have said and done, and as to the exact nature and scope of his authority, is just that which the agnostic finds it most difficult to determine." Undoubtedly, that is a primary question; but who would suppose from Prof. Huxley's statement of the case that the argument of the paper he is attacking proceeded to deal with this very point, and that he has totally ignored the chief consideration it alleged? Almost immediately after the words Prof. Huxley has quoted, the following passage occurs, which I must needs transfer to these pages, as containing the central point of the argument: "It may be asked how far we can rely on the accounts we possess of our Lord's teaching on these subjects. Now it is unnecessary for the general argument before us to enter on those questions respecting the authenticity of the gospel narratives, which ought to be regarded as settled by M. Renan's practical surrender of the adverse case. *Apart from all disputed points of criticism, no one practically doubts that our Lord lived, and that he died on the cross, in the most intense sense of filial relation to his Father in heaven, and that he bore testimony to that Father's providence, love, and grace toward mankind. The Lord's Prayer affords sufficient evidence upon these points. If the Sermon on the Mount alone be added, the whole unseen world, of which the agnostic refuses to know anything, stands unveiled before us. There you see revealed the divine Father and Creator of all things, in personal relation to his creatures, hearing their prayers, witnessing their actions, caring for them and rewarding them. There you hear of a future judgment administered by Christ himself, and of a heaven to be hereafter revealed, in which those who live as the children of that Father, and who suffer in the cause and for the sake of Christ himself, will be abundantly rewarded. If Jesus Christ preached that sermon, made those promises, and taught that prayer, then any one who says that we know nothing of God, or of a future life, or of an unseen world, says that he does not believe in Jesus Christ.*"

Prof. Huxley has not one word to say upon this argument, though the whole case is involved in it. Let us take as an example the illustration he proceeds to give. "If," he says, "I venture to doubt that the Duke of Wellington gave the command, 'Up, Guards, and at 'em!' at Waterloo, I do not think that even Dr. Wace would accuse me of disbelieving the duke." Certainly not. But if Prof. Huxley were to maintain that the pursuit of glory was the true motive of the soldier, and that it was an illusion to suppose that simple devotion to duty could be the supreme guide of military life, I should certainly charge him with contradicting the duke's teaching and disregarding his authority and example. A hundred stories like that of "Up, Guards,

and at 'em!" might be doubted, or positively disproved, and it would still remain a fact beyond all reasonable doubt that the Duke of Wellington was essentially characterized by the sternest and most devoted sense of duty, and that he had inculcated duty as the very watchword of a soldier; and even Prof. Huxley would not suggest that Lord Tennyson's ode, which has embodied this characteristic in immortal verse, was an unfounded poetical romance.

The main question at issue, in a word, is one which Prof. Huxley has chosen to leave entirely on one side—whether, namely, allowing for the utmost uncertainty on other points of the criticism to which he appeals, there is any reasonable doubt that the Lord's Prayer and the Sermon on the Mount afford a true account of our Lord's essential belief and cardinal teaching. If they do—then I am not now contending that they involve the whole of the Christian creed; I am not arguing, as Prof. Huxley would represent, that he ought for that reason alone to be a Christian—I simply represent that, as an agnostic, he must regard those beliefs and that teaching as mistaken—the result of an illusion, to say the least. I am not going, therefore, to follow Prof. Huxley's example and go down a steep place with the Gadarene swine into a sea of uncertainties and possibilities, and stake the whole case of Christian belief as against agnosticism upon one of the most difficult and mysterious narratives in the New Testament. I will state my position on that question presently. But I am first and chiefly concerned to point out that Prof. Huxley has skillfully evaded the very point and edge of the argument he had to meet. Let him raise what difficulties he pleases, with the help of his favorite critics, about the Gadarene swine, or even about all the stories of demoniacs. He will find that his critics—and even critics more rationalistic than they—fail him when it comes to the Lord's Prayer and the Sermon on the Mount, and, I will add, the story of the Passion. He will find, or rather he must have found, that the very critics he relies upon recognize that in the Sermon on the Mount and the Lord's Prayer, allowing for variations in form and order, the substance of our Lord's essential teaching is preserved. On a point which, until Prof. Huxley shows cause to the contrary, can hardly want argument, the judgment of the most recent of his witnesses may suffice—Prof. Reuss, of Strasburg. In Prof. Huxley's article on the "Evolution of Theology" in the number of this review for March, 1886, he says, "As Reuss appears to me to be one of the most learned, acute, and fair-minded of those whose works I have studied, I have made most use of the commentary and dissertations in his splendid French edition of the Bible." What, then, is the opinion of the critic for whom Prof. Huxley has this regard? In the volume of his work which treats of the first three Gospels, Reuss says at page 191-192, "If anywhere the tradition which has preserved to us the reminiscences of the life of Jesus upon earth carries with it a certainty and the evidence of its fidelity, it is here"; and again: "In short, it must be acknowledged that the redactor, in thus concentrating the substance of the moral teaching of the Lord, has rendered a real service to the religious study of this portion of the tradition, and the reserves which historical criticism has a right to make with respect to the form will in no way diminish this advantage." It will be observed that Prof. Reuss thinks, as many good critics have thought, that the Sermon on the Mount combines various

distinct utterances of our Lord, but he none the less recognizes that it embodies an unquestionable account of the substance of our Lord's teaching.

But it is surely superfluous to argue either this particular point, or the main conclusion which I have founded on it. Can there be any doubt whatever, in the mind of any reasonable man, that Jesus Christ had beliefs respecting God which an agnostic alleges there is no sufficient ground for? We know something at all events of what his disciples taught; we have authentic original documents, unquestioned by any of Prof. Huxley's authorities, as to what St. Paul taught and believed, respecting his Master's teaching; and the central point of this teaching is a direct assertion of knowledge and revelation as against the very agnosticism from which Prof. Huxley manufactured that designation. "As I passed by," said St. Paul at Athens, "I found an altar with this inscription: 'To the unknown God.' Whom therefore ye ignorantly—or in agnosticism—worship, Him I declare unto you." An agnostic withholds his assent from this primary article of the Christian creed; and though Prof. Huxley, in spite of the lack of information he alleges respecting early Christian teaching, knows enough on the subject to have a firm belief "that the Nazarenes, say of the year 40," headed by James, would have stoned any one who propounded the Nicene Creed to them, he will hardly contend that they denied that article, or doubted that Jesus Christ believed it. Let us again listen to the authority to whom Prof. Huxley himself refers. Reuss says at page 4 of the work already quoted:

Historical literature in the primitive church attaches itself in the most immediate manner to the reminiscences collected by the apostles and their friends, directly after their separation from their Master. The need of such a return to the past arose naturally from the profound impression which had been made upon them by the teaching, and still more by the individuality itself of Jesus, and on which both their hopes for the future and their convictions were founded. . . . It is in these facts, in this continuity of a tradition which could not but go back to the very morrow of the tragic scene of Golgotha that we have a strong guarantee for its authenticity. . . . We have direct historical proof that the thread of tradition was not interrupted. Not only does one of our evangelists furnish this truth in formal terms (Luke i, 2); but in many other places besides we perceive the idea, or the point of view, that all which the apostles know, think, and teach, is at bottom and essentially a reminiscence—a reflection of what they have seen and learned at another time, a reproduction of lessons and impressions received.

Now let it be allowed for argument's sake that the belief and teaching of the apostles are distinct from those of subsequent Christianity, yet it is surely a mere paradox to maintain that they did not assert, as taught by their Master, truths which an agnostic denies. They certainly spoke, as Paul did, of the love of God; they certainly spoke, as Paul did, of Jesus having been raised from the dead by God the Father (Gal. i, 1); they certainly spoke, as Paul did, of Jesus Christ returning to judge the world; they certainly spoke, as Paul did, of "the God and Father of our Lord Jesus Christ" (2 Cor. xi, 31). That they could have done this without Jesus Christ having taught God's love, or having said that God was his Father, or having declared that he would judge the world, is a supposition which will certainly be regarded by an overwhelming majority of reasonable men as a mere paradox; and I cannot conceive, until he says so, that Prof. Huxley would maintain it. But if so, then all Prof. Huxley's argumentation about the Gadarene swine is mere irrelevance to the argument he undertakes to answer. The Gospels might be obliterated as evidence to-morrow, and it would remain indisputable that Jesus Christ taught certain truths respecting God, and man's relation to God, from which an agnostic withholds his assent. If so, he does not

believe Jesus Christ's teaching; he is so far an unbeliever, and "unbeliever," Dr. Johnson says, is an equivalent of "infidel."

This consideration will indicate another irrelevance in Prof. Huxley's argument. He asks for a definition of what a Christian is, before he will allow that he can be justly called an infidel. But without being able to give an accurate definition of a crayfish, which perhaps only Prof. Huxley could do, I may be very well able to say that some creatures are not crayfish; and it is not necessary to frame a definition of a Christian in order to say confidently that a person who does not believe the broad and unquestionable elements of Christ's teachings and convictions is not a Christian. "Infidel" or "unbeliever" is of course, as Prof. Huxley says, a relative and not a positive term. He makes a great deal of play out of what he seems to suppose will be a very painful and surprising consideration to myself, that to a Mohammedan I am an infidel. Of course I am; and I should never expect a Mohammedan, if he were called upon, as I was, to argue before an assembly of his own fellow-believers, to call me anything else. Prof. Huxley is good enough to imagine me in his company on a visit to the Hazar Mosque at Cairo. When he entered that mosque without due credentials, he suspects that, had he understood Arabic, "dog of an infidel" would have been by no means the most "unpleasant" of the epithets showered upon him, before he could explain and apologize for the mistake. If, he says, "I had had the pleasure of Dr. Wace's company on that occasion, the indiscriminative followers of the Prophet would, I am afraid, have made no difference between us; not even if they had known that he was the head of an orthodox Christian seminary." Probably not; and I will add I should have felt very little confidence in any attempts which Prof. Huxley might have made, in the style of his present article, to protect me, by repudiating for himself the unpleasant epithets which he deprecates. It would, I suspect, have been of very little avail to attempt a subtle explanation, to one of the learned mollahs of whom he speaks, that he really did not mean to deny that there was one God, but only that he did not know anything on the subject, and that he desired to avoid expressing any opinion respecting the claims of Mohammed. It would be plain to the learned mollah that Prof. Huxley did not believe either of the articles of the Mohammedan creed—in other words that, for all his fine distinctions, he was at bottom a downright infidel, such as I confessed myself, and that there was an end of the matter. There is no fair way of avoiding the plain matter of fact in either case. A Mohammedan believes and asserts that there is no God but God, and that Mohammed is the prophet of God. I don't believe Mohammed. In the plain, blunt, sensible phrase people used to use on such subjects I believe he was a false prophet, and I am a downright infidel about him. The Christian creed might almost be summed up in the assertion that there is one, and but one God, and that Jesus Christ is his prophet; and whoever denies that creed says that he does not believe Jesus Christ, by whom it was undoubtedly asserted. It is better to look facts in the face, especially from a scientific point of view. Whether Prof. Huxley is justified in his denial of that creed is a further question, which demands separate consideration, but which was not, and is not now, at issue. All I say is that his position involves that disbelief or infidelity, and that this is a re-

sponsibility which must be faced by agnosticism.

But I am forced to conclude that Prof. Huxley can not have taken the pains to understand the point I raised, not only by the irrelevance of his argument on these considerations, but by a misquotation which the superior accuracy of a man of science ought to have rendered impossible. Twice over in the article he quotes me as saying that "it is, and it ought to be, an unpleasant thing for a man to have to say plainly that he does not believe in Jesus Christ." As he winds up his attack upon my paper by bringing against this statement his rather favorite charge of "immorality"—and even "most profound immorality"—he was the more bound to accuracy in his quotation of my words. But neither in the official report of the congress to which he refers, nor in any report that I have seen, is this the statement attributed to me. What I said, and what I meant to say, was that it ought to be an unpleasant thing for a man to have to say plainly "that he does not believe Jesus Christ." By inserting the little word "in," Prof. Huxley has, by an unconscious ingenuity, shifted the import of the statement. He goes on to denounce "the pestilent doctrine on which all the churches have insisted, that honest disbelief in their more or less astonishing creeds is a moral offense, indeed a sin of the deepest dye."* His interpretation exhibits, in fact, the idea in his own mind, which he has doubtless conveyed to his readers, that I said it ought to be unpleasant to a man to have to say that he does not believe in the Christian creed. I certainly think it ought, for reasons I will mention; but that is not what I said. I spoke, deliberately, not of the Christian creed as a whole, but of Jesus Christ as a person, and regarded as a witness to certain primary truths which an agnostic will not acknowledge. It was a personal consideration to which I appealed, and not a dogmatic one; and I am sorry, for that reason, that Prof. Huxley will not allow me to leave it in the reserve with which I hoped it had been sufficiently indicated. I said that "no criticism worth mentioning doubts the story of the Passion; and that story involves the most solemn attestation, again and again, of truths of which an agnostic coolly says he knows nothing. An agnosticism which knows nothing of the relation of man to God must not only refuse belief to our Lord's most undoubted teaching, but must deny the reality of the spiritual convictions in which he lived and died. It must declare that his most intimate, most intense beliefs, and his dying aspirations were an illusion. Is that supposition tolerable?" I do not think this deserves to be called "a proposition of the most profoundly immoral character." I think it ought to be unpleasant, and I am sure it always will be unpleasant, for a man to listen to the Saviour on the cross uttering such words as "Father, into thy hands I commend my spirit," and to say that they are not to be trusted as revealing a real relation between the Saviour and God. In spite of all doubts as to the accuracy of the Gospels, Jesus Christ—I trust I may be forgiven, under the stress of controversy, for mentioning his sacred name in this too familiar manner—is a tender and sacred figure to all thoughtful minds, and it is, it ought to be, and it always will be, a very painful thing, to say that he lived and died under a mistake in respect to the words which were first and last on his lips. I think, as I have admitted, that it should be unpleasant for a

man who has as much appreciation of Christianity, and of its work in the world, as Prof. Huxley sometimes shows, to have to say that its belief was founded on no objective reality. The unpleasantness, however, of denying one system of thought may be balanced by the pleasantness, as Prof. Huxley suggests, of asserting another and a better one. But nothing, to all time, can do away with the unpleasantness, not only of repudiating sympathy with the most sacred figure of humanity in his deepest beliefs and feelings, but of pronouncing him under an illusion in his last agony. If it be the truth, let it by all means be said; but if we are to talk of "immorality" in such matters, I think there must be a lack of moral sensibility in any man who could say it without pain.

The plain fact is that this misquotation would have been as impossible as a good deal else of Prof. Huxley's argument, had he, in any degree, appreciated the real strength of the hold which Christianity has over men's hearts and minds. The strength of the Christian Church, in spite of its faults, errors, and omissions, is not in its creed, but in its Lord and Master. In spite of all the critics, the Gospels have conveyed to the minds of millions of men a living image of Christ. They see him there; they hear his voice; they listen, and they believe him. It is not so much that they accept certain doctrines as taught by him, as that they accept him, himself, as their Lord and their God. The sacred fire of trust in him descended upon the apostles, and has from them been handed on from generation to generation. It is with that living personal figure that agnosticism has to deal; and as long as the Gospels practically produce the effect of making that figure a reality to human hearts, so long will the Christian faith, and the Christian Church, in their main characteristics, be vital and permanent forces in the world. Prof. Huxley tells us, in a melancholy passage, that he can not define "the grand figure of Jesus." Who shall dare to "define" it? But saints have both written and lived an *imitatio Christi*, and men and women can feel and know what they can not define. Prof. Huxley, it would seem, would have us all wait coolly until we have solved all critical difficulties, before acting on such a belief. "Because," he says, "we are often obliged, by the pressure of events, to act on very bad evidence, it does not follow that it is proper to act on such evidence when the pressure is absent." Certainly not; but it is strange ignorance of human nature for Prof. Huxley to imagine that there is no "pressure" in this matter. It was a voice which understood the human heart better which said, "Come unto me, all ye that labor and are heavy laden, and I will give you rest"; and the attraction of that voice outweighs many a critical difficulty under the pressure of the burdens and the sins of life.

Prof. Huxley, indeed, admits, in one sentence of his article, the force of this influence on individuals.

(If he says) a man can find a friend, the hypostasis of all his hopes, the mirror of his ethical ideal, in the pages of any, or of all, of the Gospels, let him live by faith in that ideal. Who shall, or can, forbid him? But let him not delude himself with the notion that his faith is evidence of the objective reality of that in which he trusts. Such evidence is to be obtained only by the use of the methods of science, as applied to history and to literature, and it amounts at present to very little.

Well, a single man's belief in an ideal may be very little evidence of its objective reality. But the conviction of millions of men, generation after generation, of the veracity of the four evangelical witnesses,

and of the human and divine reality of the figure they describe, has at least something of the weight of the verdict of a jury. *Securus judicat orbis terrarum*. Practically the figure of Christ lives. The Gospels have created it; and it subsists as a personal fact in life, alike among believers and unbelievers. Prof. Huxley himself, in spite of all his skepticism, appears to have his own type of this character. The apologue of the woman taken in adultery might, he says, "if internal evidence were an infallible guide, well be affirmed to be atypical example of the teachings of Jesus." Internal evidence may not be an infallible guide; but it certainly carries great weight, and no one has relied more upon it in these questions than the critics whom Prof. Huxley quotes.

But as I should be sorry to imitate Prof. Huxley, on so momentous a subject, by evading the arguments and facts he alleges, I will consider the question of external evidence on which he dwells. I must repeat that the argument of my paper is independent of this controversy. The fact that our Lord taught and believed what agnostics ignore is not dependent on the criticism of the four Gospels. In addition to the general evidence to which I have alluded, there is a further consideration which Prof. Huxley feels it necessary to mention, but which he evades by an extraordinary inconsequence. He alleges that the story of the Gadarene swine involves fabulous matter, and that this discredits the trustworthiness of the whole Gospel record. But he says:

At this point a very obvious objection arises and deserves full and candid consideration. It may be said that critical skepticism carried to the length suggested is historical pyrrhonism; that if we are to altogether discredit an ancient or a modern historian because he has assumed fabulous matter to be true, it will be as well to give up paying any attention to history. . . . Of course (he acknowledges) this is perfectly true. I am afraid there is no man alive whose witness could be accepted, if the condition precedent were proof that he had never invented and promulgated a myth.

The question, then, which Prof. Huxley himself raises, and which he had to answer, was this: Why is the general evidence of the Gospels, on the main facts of our Lord's life and teaching, to be discredited, even if it be true that they have invented or promulgated a myth about the Gadarene swine? What is his answer to that simple and broad question? Strange to say, absolutely none at all! He leaves this vital question without any answer, and goes back to the Gadarene swine. The question he raises is whether the supposed incredibility of the story of the Gadarene swine involves the general untrustworthiness of the story of the Gospels; and his conclusion is that it involves the incredibility of the story of the Gadarene swine. A more complete evasion of his own question it would be difficult to imagine. As Prof. Huxley almost challenges me to state what I think of that story, I have only to say that I fully believe it, and moreover that Prof. Huxley, in this very article, has removed the only consideration which would have been a serious obstacle to my belief. If he were prepared to say, on his high scientific authority, that the narrative involves a contradiction of established scientific truth, I could not but defer to such a decision, and I might be driven to consider those possibilities of interpolation in the narrative, which Prof. Huxley is good enough to suggest to all who feel the improbability of the story too much for them. But Prof. Huxley expressly says:

I admit I have no *a priori* objection to offer. . . . For anything I can absolutely prove to the contrary, there may be spiritual things capable of the same transmigration, with like effects. . . . So I declare, as plainly as I can, that I am unable to show cause why these transferable devils should not exist.

Very well, then, as the highest science of the day is unable to show cause against the possibility of the narrative, and as I regard the Gospels as containing the evidence of trustworthy persons who were contemporary with the events narrated, and as their general veracity carries to my mind the greatest possible weight, I accept their statement in this as in other instances. Prof. Huxley ventures "to doubt whether at this present moment any Protestant theologian, who has a reputation to lose, will say that he believes the Gadarene story." He will judge whether I fall under his description; but I repeat that I believe it, and that he has removed the only objection to my believing it.

However, to turn finally to the important fact of external evidence. Prof. Huxley reiterates, again and again, that the verdict of scientific criticism is decisive against the supposition that we possess in the four Gospels the authentic and contemporary evidence of known writers. He repeats, "without the slightest fear of refutation, that the four Gospels, as they have come to us, are the work of unknown writers." In particular, he challenges my allegation of "M. Renan's practical surrender of the adverse case"; and he adds the following observations, to which I beg the reader's particular attention:

I thought (he says) I knew M. Renan's works pretty well, but I have contrived to miss this "practical"—(I wish Dr. Wace had defined the scope of that useful adjective)—surrender. However, as Dr. Wace can find no difficulty in pointing out the passage of M. Renan's writings, by which he feels justified in making his statement, I shall wait for further enlightenment, contenting myself, for the present, with remarking that if M. Renan were to retract and do penance in Notre Dame to-morrow for any contributions to biblical criticism that may be specially his property, the main results of that criticism, as they are set forth in the works of Strauss, Baur, Reuss, and Volkmar, for example, would not be sensibly affected.

Let me begin then, by enlightening Prof. Huxley about M. Renan's surrender. I have the less difficulty in doing so as the passages he has contrived to miss have been collected by me already in a little tract on the "Authenticity of the Gospels,"* and in some lectures on the "Gospel and its Witnesses";† and I shall take the liberty, for convenience' sake, of repeating some of the observations there made."

I beg first to refer to the preface to M. Renan's "Vie de Jésus."‡ There M. Renan says:

As to Luke, doubt is scarcely possible. The Gospel of St. Luke is a regular composition, founded upon earlier documents. It is the work of an author who chooses, curtails, combines. The author of this Gospel is certainly the same as the author of the Acts of the Apostles. Now, the author of the Acts seems to be a companion of St. Paul—a character which accords completely with St. Luke. I know that more than one objection may be opposed to this reasoning; but one thing at all events is beyond doubt, namely, that the author of the third Gospel and of the Acts is a man who belonged to the second apostolic generation; and this suffices for our purpose. The date of this Gospel, moreover, may be determined with sufficient precision by considerations drawn from the book itself. The twenty-first chapter of St. Luke, which is inseparable from the rest of the work, was certainly written after the siege of Jerusalem, but not long after. We are, therefore, here on solid ground, for we are dealing with a work proceeding entirely from the same hand, and possessing the most complete unity.

It may be important to observe that this admission has been supported by M. Renan's further investigations, as expressed in his subsequent volume on "The Apostles." In the preface to that volume he discusses fully the nature and value of the narrative contained in the Acts of the Apostles, and he pronounces the following decided opinions as to the authorship of that book, and its connection with the Gospel of St. Luke (page x. *sq.*):

One point which is beyond question is that the Acts are by the same author as the third Gospel, and are a continuation of that Gospel. One need not stop to prove this proposition, which has never been seriously contested. The prefaces at the commencement of each work, the dedication of each to Theophilus, the perfect resemblance of style and of ideas, furnish on this point abundant demonstrations.

A second proposition, which has not the same certainty, but which may, however, be regarded as extremely probable, is that the author of the Act is a disciple of Paul, who accompanied him for a considerable part of his travels.

* Religious Tract Society.

† John Murray, 1883.

‡ Fifteenth edition, p. 49.

At a first glance, M. Renan observes, this proposition appears indubitable, from the fact that the author, on so many occasions, uses the pronoun "we," indicating that on those occasions he was one of the apostolic band by whom St. Paul was accompanied. "One may even be astonished that a proposition apparently so evident should have found persons to contest it." He notices, however, the difficulties which have been raised on the point, and then proceeds as follows (page 14):

Must we be checked by these objections? I think not; and I persist in believing that the person who finally prepared the Acts is really the disciple of Paul, who says "we" in the last chapters. All difficulties, however insoluble they may appear, ought to be, if not dismissed, at least held in suspense, by an argument so decisive as that which results from the use of this word "we."

He then observes that MSS. and tradition combine in assigning the third Gospel to a certain Luke, and that it is scarcely conceivable that a name in other respects obscure should have been attributed to so important a work for any other reason than that it was the name of the real author. Luke, he says, had no place in tradition, in legend, or in history, when these two treatises were ascribed to him. M. Renan concludes in the following words: "We think, therefore, that the author of the third Gospel and of the Acts is in all reality Luke, the disciple of Paul."

Now let the import of these expressions of opinion be duly weighed. Of course, M. Renan's judgments are not to be regarded as affording in themselves any adequate basis for our acceptance of the authenticity of the chief books of the New Testament. The Acts of the Apostles and the four Gospels bear on their face certain positive claims, on the faith of which they have been accepted in all ages of the Church; and they do not rest, in the first instance, on the authority of any modern critic. But though M. Renan would be a very unsatisfactory witness to rely upon for the purpose of positive testimony to the Gospels, his estimates of the value of modern critical objections to those sacred books have all the weight of the admissions of a hostile witness. No one doubts his familiarity with the whole range of the criticism represented by such names as Strauss and Baur, and no one questions his disposition to give full weight to every objection which that criticism can urge. Even without assuming that he is prejudiced on either one side or the other, it will be admitted on all hands that he is more favorably disposed than otherwise to such criticism as Prof. Huxley relies on. When, therefore, with this full knowledge of the literature of the subjects, such a writer comes to the conclusion that the criticism in question has entirely failed to make good its case on a point like that of the authorship of St. Luke's Gospel, we are at least justified in concluding that critical objections do not possess the weight which unbelievers or skeptics are wont to assign to them. M. Renan, in a word, is no adequate witness to the Gospels; but he is a very significant witness as to the value of modern critical objections to them.

Let us pass to the two other so-called "synoptical" Gospels. With respect to St. Matthew, M. Renan says in the same preface ("Vie de Jésus," p. lxxx):

To sum up, I admit the four canonical Gospels as serious documents. All go back to the age which followed the death of Jesus; but their historical value is very diverse. St. Matthew evidently deserves peculiar confidence for the discourses. Here are "the oracles," the very notes taken while the memory of Jesus was living and definite. A kind of flashing brightness at once sweet and terrible, a divine force, if I may so say, underlies these words, detaches them from the context, and renders them easily recognizable by the critic.

In respect again to St. Mark, he says (p. lxxxii):

The Gospel of St. Mark is the one of the three synoptics which has remained the most ancient, the most original, and to which the least of later additions have been made. The details of fact possess in St. Mark a definiteness which we seek in vain in the other evangelists. He is fond of reporting certain sayings of our Lord in Syro-Chaldaic. He is full of minute observations, proceeding, beyond doubt, from an eye witness. There is nothing to conflict with the supposition that this eye-witness, who had evidently followed Jesus, who had loved him and watched him in close intimacy, and who had preserved a vivid image of him, was the apostle Peter himself, as Papias has it.

I call these admissions a "practical surrender" of the adverse case, as stated by critics like Strauss and Baur, who denied that we had in the Gospels contemporary evidence, and I do not think it necessary to define the adjective, in order to please Prof. Huxley's appetite for definitions. At the very least it is a direct contradiction of Prof. Huxley's statement* that we know "absolutely nothing" of "the originator or originators" of the narratives in the first three Gospels; and it is an equally direct contradiction of the case, on which his main reply to my paper is based, that we have no trustworthy evidence of what our Lord taught and believed.

But Prof. Huxley seems to have been apprehensive that M. Renan would fail him, for he proceeds, in the passage I have quoted, to throw him over and to take refuge behind "the main results of biblical criticism, as they are set forth in the works of Strauss, Baur, Reuss, and Volkmar, for example." It is scarcely comprehensible how a writer, who has acquaintance enough with this subject to venture on Prof. Huxley's sweeping assertions, can have ventured to couple together those four names for such a purpose. "Strauss, Baur, Reuss, and Volkmar"! Why, they are absolutely destructive of one another! Baur rejected Strauss's theory and set up one of his own; while Reuss and Volkmar in their turn have each dealt fatal blows at Baur's. As to Strauss, I need not spend more time on him than to quote the sentence in which Baur himself puts him out of court on this particular controversy. He says,† "The chief peculiarity of Strauss's work is, that it is a criticism of the Gospel history without a criticism of the Gospels." Strauss, in fact, explained the miraculous stories in the Gospels by resolving them into myths, and it was of no importance to his theory how the documents originated. But Baur endeavored, by a minute criticism of the Gospels themselves, to investigate the historical circumstances of their origin; and he maintained that they were *Tendenz-Schriften*, compiled in the second century, with polemical purposes. Volkmar, however, is in direct conflict with Baur on this point, and in the very work to which Prof. Huxley refers,‡ he enumerates (p. 18) among "the written testimonies of the first century"—besides St. Paul's epistles to the Galatians, Corinthians, and Romans, and the apocalypse of St. John—"the Gospel of Jesus Christ, the Son of God, according to John Mark of Jerusalem, written a few years after the destruction of Jerusalem, between the years 70 and 80 of our reckoning—about 75 probably; to be precise, about 73," and he proceeds to give a detailed account of it, "according to the oldest text, and particularly the Vatican text," as indispensable to his account of Jesus of Nazareth. He treats it as written (p. 172) either by John Mark of Jerusalem himself, or by a younger friend of his. Baur, therefore, having upset Strauss, Volkmar proceeds to

* Page 24.

† "Kritische Untersuchungen über die kanonischen Evangelien," 1847, p. 41.

‡ "Jesus Nazarenus und die erste christliche Zeit," 1882.

upset Baur; and what does Reuss do? I quote again from that splendid French edition of the Bible, on which Prof. Huxley so much relies. On page 88 of Reuss's introduction to the synoptic Gospels, he sums up "the results he believes to have been obtained by critical analysis," under thirteen heads; and the following are some of them:

2. Of the three synoptic Gospels one only, that which ecclesiastical tradition agrees in attributing to Luke, has reached us in its primitive form.

3. Luke could draw his knowledge of the Gospel history partly from oral information; he was able, in Palestine itself, to receive direct communications from immediate witnesses. . . . We may think especially here of the history of the passion and the resurrection, and perhaps also of some other passages of which he is the sole narrator.

4. A book, which an ancient and respectable testimony attributes to Mark, the disciple of Peter, was certainly used by St. Luke as the principal source of the portion of his Gospel between chap. ter iv, 31, and ix, 50; and between xviii, 15, and xxi, 38.

5. According to all probability, the book of Mark, consulted by Luke, comprised in its primitive form what we read in the present day from Mark i, 21, to xiii, 37.

It seems unnecessary, for the purpose of estimating the value of Prof. Huxley's appeal to these critics, to quote any more. It appears from these statements of Reuss that if "the results of biblical criticism," as represented by him, are to be trusted, we have the whole third Gospel in its primitive form, as it was written by St. Luke; and in this, as we have seen, Reuss is in entire agreement with Renan. But besides this, a previous book written by Mark, St. Peter's disciple, was certainly in existence before Luke's Gospel, and was used by Luke; and in all probability this book was, in its primitive form, the greater part of our present Gospel of St. Mark.

Such are those "results of biblical criticism" to which Prof. Huxley has appealed; and we may fairly judge by these not only of the value of his special contention in reply to my paper, but of the worth of the sweeping assertions he, and writers like him, are given to making about modern critical science. Prof. Huxley says that we know "absolutely nothing" about the originators of the Gospel narratives, and he appeals to criticism in the persons of Volkmar and Reuss. Volkmar says that the second Gospel is really either by St. Mark or by one of his friends, and was written about the year 75. Reuss says that the third Gospel, as we now have it, was really by St. Luke. Now Prof. Huxley is, of course, entitled to his own opinion; but he is not entitled to quote authorities in support of his opinion when they are in direct opposition to it. He asserts, without the slightest fear of refutation, that "the four Gospels, as they have come to us, are the work of unknown writers." His arguments in defense of such a position will be listened to with great respect; but let it be borne in mind that the opposite arguments he has got to meet are not only those of orthodox critics like myself, but those of Renan, of Volkmar, and of Reuss—I may add of Pfeleiderer, well known in this country by his Hibbert Lectures, who, in his recent work on original Christianity, attributes most positively the second Gospel in its present form to St. Mark, and declares that there is no ground whatever for that supposition of an *Ur-Marcus*—that is an original groundwork—from which Prof. Huxley alleges that "at the present time there is no visible escape." If I were such an authority on morality as Prof. Huxley, I might perhaps use some unpleasant language respecting this vague assumption of criticism being all on one side, when it, in fact, directly contradicts him; and his case is not the only one to which such strictures might be applied. In "Robert Elsmere," for example, there is some vamping about the "great critical operation of the present century" having destroyed the historical basis of the Gospel narrative.

As a matter of fact, as we have seen, the great critical operation has resulted, according to the testimony of the critics whom Prof. Huxley himself selects, in establishing the fact that we possess contemporary records of our Lord's life from persons who were either eye-witnesses, or who were in direct communication with eye-witnesses, on the very scene in which it was passed. Either Prof. Huxley's own witnesses are not to be trusted, or Prof. Huxley's allegations are rash and unfounded. Conclusions which are denied by Volkmar, denied by Renan, denied by Reuss, are not to be thrown at our heads with a superior air, as if they could not be reasonably doubted. The great result of the critical operation of this century has, in fact, been to prove that the contention with which it started in the persons of Straus and Baur, that we have no contemporary records of Christ's life, is wholly untenable. It has not convinced any of the living critics to whom Prof. Huxley appeals; and if he, or any similar writer, still maintains such an assertion let it be understood that he stands alone against the leading critics of Europe in the present day.

Perhaps I need say no more for the present in reply to Prof. Huxley. I have, I think, shown that he has evaded my point; he has evaded his own points; he has misquoted my words; he has misrepresented the results of the very criticism to which he appeals; and he rests his case on assumptions which his own authorities repudiate. The questions he touches are very grave ones, not to be adequately treated in a review article. But I should have supposed it a point of scientific morality to treat them, if they are to be treated, with accuracy of reference and strictness of argument.

IV.

AGNOSTICISM.

A REPLY TO PROFESSOR HUXLEY.

By W. C. MAGEE.

BISHOP OF PETERBOROUGH.

I SHOULD be wanting in the respect which I sincerely entertain for Prof. Huxley if I were not to answer his "appeal" to me in the last number of this review for my opinion on a point in controversy between him and Dr. Wace. Prof. Huxley asks me, "in the name of all that is Hibernian, why a man should be expected to call himself a miscreant or an infidel"? I might reply to this after the alleged fashion of my countrymen by asking him another question, namely—When or where did I ever say that I expected him to call himself by either of these names? I can not remember having said anything that even remotely implied this, and I do not therefore exactly see why he should appeal to my confused "Hibernian" judgment to decide such a question.

As he has done so, however, I reply that I think it unreasonable to expect a man to call himself anything unless and until good and sufficient reason has been given him why he should do so. We are all of us bad judges as to what we are and as to what we should therefore be

called. Other persons classify us according to what they know, or think they know, of our characters or opinions, sometimes correctly, sometimes incorrectly. And were I to find myself apparently incorrectly classified, as I very often do, I should be quite content with asking the person who had so classified me, first to define his terms, and next to show that these, as defined, were correctly applied to me. If he succeeded in doing this, I should accept his designation of me without hesitation, inasmuch as I should be sorry to call myself by a false name.

In this case, accordingly, if I might venture a suggestion to Prof. Huxley, it would be that the term "infidel" is capable of definition, and that when Dr. Wace has defined it, if the professor accept his definition, it would remain for them to decide between them whether Prof. Huxley's utterances do or do not bring him under the category of infidels, as so defined. Then, if it could be clearly proved that they do, from what I know of Prof. Huxley's love of scientific accuracy and his courage and candor, I certainly should expect that he would call himself an infidel—and a miscreant too, in the original and etymological sense of that unfortunate term, and that he would even glory in those titles. If they should not be so proved to be applicable, then I should hold it to be as unreasonable to expect him to call himself by such names as he, I suppose, would hold it to be to expect us Christians to admit, without better reason than he has yet given us, that Christianity is "the sorry stuff" which, with his "profoundly" moral readiness to say "unpleasant" things, he is pleased to say that it is.

There is another reference to myself, however, in the professor's article as to which I feel that he has a better right to appeal to me—or, rather, against me, to the readers of this review—and that is, as to my use, in my speech at the Manchester Congress, of the expression "cowardly agnosticism." I have not the report of my speech before me, and am writing, therefore, from memory; but my memory or the report must have played me sadly false if I am made to describe all agnostics as cowardly. A much slighter knowledge than I possess of Prof. Huxley's writings would have certainly prevented my applying to all agnosticism or agnostics such an epithet.

What I intended to express, and what I think I did express by this phrase was, that there is an agnosticism which is cowardly. And this I am convinced that there is, and that there is a great deal of it too, just now. There is an agnosticism which is simply the cowardly escaping from the pain and difficulty of contemplating and trying to solve the terrible problems of life by the help of the convenient phrase, "I don't know," which very often means "I don't care." "We don't know anything, don't you know, about these things. Prof. Huxley, don't you know, says that we do not, and I agree with him. Let us split a B. and S."

There is, I fear, a very large amount of this kind of agnosticism among the more youthful professors of that philosophy, and indeed among a large number of easy-going, comfortable men of the world, as they call themselves, who find agnosticism a pleasant shelter from the trouble of thought and the pain of effort and self-denial. And if I remember rightly it was of such agnostics I was speaking when I described them as "chatterers in our clubs and drawing-rooms," and as "freethinkers who had yet to learn to think."

There is therefore in my opinion *a* cowardly agnosticism just as there is also *a* cowardly Christianity. A Christian who spends his whole life in the selfish aim of saving his own soul, and never troubles himself with trying to help to save other men, either from destruction in the next world or from pain and suffering here, is a cowardly Christian. The eremites of the early days of Christianity, who fled away from their place in the world where God had put them, to spend solitary and, as they thought, safer lives in the wilderness, were typical examples of such cowardice. But in saying that there is such a thing as *a* cowardly Christianity, I do not thereby allege that there is no Christianity which is not cowardly. Similarly, when I speak of *a* cowardly agnosticism, I do not thereby allege that there is no agnosticism which is not cowardly, or which may not be as fearless as Prof. Huxley has always shown himself to be.

I hope that I have now satisfied the professor on the two points on which he has appealed to me. There is much in the other parts of his article which tempts me to reply. But I have a dislike to thrusting myself into other men's disputes, more especially when a combatant like Dr. Wace, so much more competent than myself, is in the field. I leave the professor in his hands, with the anticipation that he will succeed in showing him that a scientist dealing with questions of theology or biblical criticism may go quite as far astray as theologians often do in dealing with questions of science.

My reply to Prof. Huxley is accordingly confined to the strictly personal questions raised by his references to myself. I hope that, after making due allowance for Hibernicisms and for imperfect acquaintance with English modes of thought and expression, he will accept my explanation as sufficient.

V.

AGNOSTICISM : A REJOINDER.

BY PROF. THOMAS H. HUXLEY.

THE concluding paragraph of the Bishop of Peterborough's reply to the appeal which I addressed to him in the penultimate number of this review, leads me to think that he has seen a personal reference where none was intended. I had ventured to suggest that the demand that a man should call himself an infidel, savored very much of the flavor of a "bull"; and, even had the Right Reverend prelate been as stolid an Englishman as I am, I should have entertained the hope, that the oddity of talking of the cowardice of persons who object to call themselves by a nickname, which must in their eyes be as inappropriate as, in the intention of the users, it is offensive, would have struck him. But, to my surprise, the bishop has not even yet got sight of that absurdity. He thinks, that if I accept Dr. Wace's definition of his much-loved epithet, I am logically bound not only to adopt the titles of infidel and miscreant, but that I shall "even glory in those titles." As I have shown, "infidel" merely means somebody

who does not believe what you believe yourself, and therefore Dr. Wace has a perfect right to call, say, my old Egyptian donkey-driver, Nooleh, and myself, infidels, just as Nooleh and I have a right to call him an infidel. The ludicrous aspect of the thing comes in only when either of us demands that the two others should so label themselves. It is a terrible business to have to explain a mild jest, and I pledge myself not to run the risk of offending in this way again. I see how wrong I was in trusting to the bishop's sense of the ludicrous, and I beg leave unreservedly to withdraw my misplaced confidence. And I take this course the more readily as there is something about which I am obliged again to trouble the Bishop of Peterborough, which is certainly no jesting matter. Referring to my question, the bishop says that if they (the terms "infidel" and "miscreant")

should not be so proved to be applicable, then I should hold it to be as unreasonable to expect him to call himself by such names as he, I suppose, would hold it to be to expect us Christians to admit, without better reason than he has yet given us, that Christianity is "the sorry stuff" which, with his "profoundly" moral readiness to say "unpleasant" things, he is pleased to say that it is.*

According to those "English modes of thought and expression," of which the bishop seems to have but a poor opinion, this is a deliberate assertion that I had said that Christianity is "sorry stuff." And, according to the same standard of fair dealing, it is, I think, absolutely necessary for the Bishop of Peterborough to produce the evidence on which this positive statement is based. I shall be unfeignedly surprised if he is successful in proving it; but it is proper for me to wait and see.

Those who passed from Dr. Wace's article in the last number of this review to the anticipatory confutation of it which followed in "The New Reformation," must have enjoyed the pleasure of a dramatic surprise—just as when the fifth act of a new play proves unexpectedly bright and interesting. Mrs. Ward will, I hope, pardon the comparison, if I say that her effective clearing away of antiquated incumbrances from the lists of the controversy reminds me of nothing so much as of the action of some neat-handed, but strong-wristed, Phyllis, who, gracefully wielding her long-handled "Turk's head," sweeps away the accumulated results of the toil of generations of spiders. I am the more indebted to this luminous sketch of the results of critical investigation, as it is carried out among those theologians who are men of science and not mere counsel for creeds, since it has relieved me from the necessity of dealing with the greater part of Dr. Wace's polemic, and enables me to devote more space to the really important issues which have been raised.†

Perhaps, however, it may be well for me to observe that approbation of the manner in which a great biblical scholar, for instance Reuss, does his work does not commit me to the adoption of all, or indeed of any of his views; and further, that the disagreements of a series of investigators do not in any way interfere with the fact that each of them has made important contributions to the body of truth ultimately established. If I cite Buffon, Linnæus, Lamarck, and Cuvier, as having each and all taken a leading share in building up modern biology, the statement that every one of these great naturalists disagreed with, and even more or less contradicted, all the rest is

* Page 45.

† I may perhaps return to the questions of the authorship of the Gospels. For the present I must content myself with warning my readers against any reliance upon Dr. Wace's statements as to the results arrived at by modern criticism. They are as gravely as surprisingly erroneous.

quite true; but the supposition that the latter assertion is in any way inconsistent with the former, would betray a strange ignorance of the manner in which all true science advances.

Dr. Wace takes a great deal of trouble to make it appear that I have desired to evade the real questions raised by his attack upon me at the Church Congress. I assure the reverend principal that in this, as in some other respects, he has entertained a very erroneous conception of my intentions. Things would assume more accurate proportions in Dr. Wace's mind if he would kindly remember that it is just thirty years since ecclesiastical thunderbolts began to fly about my ears. I have had the "Lion and the Bear" to deal with, and it is long since I got quite used to the threatenings of episcopal Goliaths, whose crossiers were like unto a weaver's beam. So that I almost think I might not have noticed Dr. Wace's attack, personal as it was; and although, as he is good enough to tell us, separate copies are to be had for the modest equivalent of twopence, as a matter of fact, it did not come under my notice for a long time after it was made. May I further venture to point out that (reckoning postage) the expenditure of twopence-halfpenny, or, at the most, threepence, would have enabled Dr. Wace so far to comply with ordinary conventions as to direct my attention to the fact that he had attacked me before a meeting at which I was not present? I really am not responsible for the five months' neglect of which Dr. Wace complains. Singularly enough, the Englishry who swarmed about the Engadine, during the three months that I was being brought back to life by the glorious air and perfect comfort of the Maloja, did not, in my hearing, say anything about the important events which had taken place at the Church Congress; and I think I can venture to affirm that there was not a single copy of Dr. Wace's pamphlet in any of the hotel libraries which I rummaged in search of something more edifying than dull English or questionable French novels.

And now, having, as I hope, set myself right with the public as regards the sins of commission and omission with which I have been charged, I feel free to deal with matters to which time and type may be more profitably devoted.

The Bishop of Peterborough indulges in the anticipation that Dr. Wace will succeed in showing me "that a scientist dealing with questions of theology or biblical criticism may go quite as far astray as theologians often do in dealing with questions of science."* I have already admitted that vaticination is not in my line; and I can not so much as hazard a guess whether the spirit of prophecy which has descended on the bishop comes from the one or the other of the two possible sources recognized by the highest authorities. But I think it desirable to warn those who may be misled by phraseology of this kind, that the antagonists in the present debate are not quite rightly represented by it. Undoubtedly, Dr. Wace is a theologian; and I should be the last person to question that his whole cast of thought and style of argumentation are pre-eminently and typically theological. And, if I must accept the hideous term "scientist" (to which I object even more than I do to "infidel"), I am ready to admit that I am one of the people so denoted.

But I hope and believe that there is not a solitary argument I have

used, or that I am about to use, which is original, or has anything to do with the fact that I have been chiefly occupied with natural science. They are all, facts and reasoning alike, either identical with, or consequential upon, propositions which are to be found in the works of scholars and theologians of the highest repute in the only two countries, Holland and Germany,* in which, at the present time, professors of theology are to be found whose tenure of their posts does not depend upon the results to which their inquiries lead them.†

It is true that, to the best of my ability, I have satisfied myself of the soundness of the foundations on which my arguments are built, and I desire to be held fully responsible for everything I say. But, nevertheless, my position is really no more than that of an expositor; and my justification for undertaking it is simply that conviction of the supremacy of private judgment (indeed, of the impossibility of escaping it) which is the foundation of the Protestant Reformation, and which was the doctrine accepted by the vast majority of the Anglicans of my youth, before that backsliding toward the "beggarly rudiments" of an effete and idolatrous sacerdotalism which has, even now, provided us with the saddest spectacle which has been offered to the eyes of Englishmen in this generation. A high court of ecclesiastical jurisdiction, with a host of great lawyers in battle array, is, and, for Heaven knows how long, will be occupied with these very questions of "washings of cups and pots and brazen vessels," which the Master, whose professed representatives are rending the Church over these squabbles, had in his mind when, as we are told, he uttered the scathing rebuke:

Well did Isaiah prophesy of you hypocrites, as it is written:

This people honoreth me with their lips,

But their heart is far from me:

But in vain do they worship me,

Teaching as their doctrines the precepts of men (Mark vii, 6, 7).

Men who can be absorbed in bickerings over miserable disputes of this kind can have but little sympathy with the old evangelical doctrine of the "open Bible," or anything but a grave misgiving of the results of diligent reading of the Bible, without the help of ecclesiastical spectacles, by the mass of the people. Greatly to the surprise of many of my friends, I have always advocated the reading of the Bible, and the diffusion of the study of that most remarkable collection of books among the people. Its teachings are so infinitely superior to those of the sects, who are just as busy now as the Pharisees were eighteen hundred years ago, in smothering them under "the precepts of men"; it is so certain, to my mind, that the Bible contains within itself the refutation of nine tenths of the mixture of sophistical metaphysics and old-world superstition which has been piled round it by the so-called Christians of later times; it is so clear that the only immediate and ready antidote to the poison which has been mixed

* The United States ought, perhaps, to be added, but I am not sure.

† Imagine that all our chairs of Astronomy had been founded in the fourteenth century, and that their incumbents were bound to sign Ptolemaic articles. In that case, with every respect for the efforts of persons thus hampered to attain and expound the truth, I think men of common sense would go elsewhere to learn astronomy. Zeller's "Vorträge und Abhandlungen" were published and came into my hands a quarter of a century ago. The writer's rank, as a theologian to begin with, and subsequently as a historian of Greek philosophy, is of the highest. Among these essays are two—"Das Urchristenthum" and "Die Tübinger historische Schule"—which are likely to be of more use to those who wish to know the real state of the case than all that the official "apologists," with their one eye on truth and the other on the tenets of their sect, have written. For the opinion of a scientific theologian about theologians of this stamp see pp. 225 and 227 of the "Vorträge."

with Christianity, to the intoxication and delusion of mankind, lies in copious draughts from the undefiled spring, that I exercise the right and duty of free judgment on the part of every man, mainly for the purpose of inducing other laymen to follow my example. If the New Testament is translated into Zulu by Protestant missionaries, it must be assumed that a Zulu convert is competent to draw from its contents all the truths which it is necessary for him to believe. I trust that I may, without immodesty, claim to be put on the same footing as the Zulu.

The most constant reproach which is launched against persons of my way of thinking is, that it is all very well for us to talk about the deductions of scientific thought, but what are the poor and the uneducated to do? Has it ever occurred to those who talk in this fashion that the creeds and articles of their several confessions; their determination of the exact nature and extent of the teachings of Jesus; their expositions of the real meaning of that which is written in the Epistles (to leave aside all questions concerning the Old Testament) are nothing more than deductions, which, at any rate, profess to be the result of strictly scientific thinking, and which are not worth attending to unless they really possess that character? If it is not historically true that such and such things happened in Palestine eighteen centuries ago, what becomes of Christianity? And what is historical truth but that of which the evidence bears strict scientific investigation? I do not call to mind any problem of natural science which has come under my notice, which is more difficult, or more curiously interesting as a mere problem, than that of the origin of the synoptic Gospels and that of the historical value of the narratives which they contain. The Christianity of the churches stands or falls by the results of the purely scientific investigation of these questions. They were first taken up in a purely scientific spirit just about a century ago; they have been studied, over and over again, by men of vast knowledge and critical acumen; but he would be a rash man who should assert that any solution of these problems, as yet formulated, is exhaustive. The most that can be said is that certain prevalent solutions are certainly false, while others are more or less probably true.

If I am doing my best to rouse my countrymen out of their dogmatic slumbers, it is not that they may be amused by seeing who gets the best of it, in a contest between a "scientist" and a theologian. The serious question is whether theological men of science, or theological special pleaders, are to have the confidence of the general public; it is the question whether a country in which it is possible for a body of excellent clerical and lay gentlemen to discuss, in public meeting assembled, how much it is desirable to let the congregations of the faithful know of the results of biblical criticism, is likely to wake up with anything short of the grasp of a rough lay hand upon its shoulder; it is the question whether the New Testament books, being as I believe they were, written and compiled by people who, according to their lights, were perfectly sincere, will not, when properly studied as ordinary historical documents, afford us the means of self-criticism. And it must be remembered that the New Testament books are not responsible for the doctrine invented by the churches that they are anything but ordinary historical documents. The author of the third Gospel tells us as straightforwardly as a man can that he has no claim to any other character than that of an ordi-

nary compiler and editor, who had before him the works of many and variously qualified predecessors.

In my former papers, according to Dr. Wace, I have evaded giving an answer to his main proposition, which he states as follows:

Apart from all disputed points or criticism, no one practically doubts that our Lord lived and that he died on the cross, in the most intense sense of filial relation to his Father in heaven, and that he bore testimony to that Father's providence, love, and grace toward mankind. The Lord's Prayer affords a sufficient evidence on these points. If the Sermon on the Mount alone be added, the whole unseen world, of which the agnostic refuses to know anything, stands unveiled before us. . . . If Jesus Christ preached that sermon, made those promises, and taught that prayer, then any one who says that we know nothing of God, or of a future life, or of an unseen world, says that he does not believe Jesus Christ.*

Again—

The main question at issue, in a word, is one which Prof. Huxley has chosen to leave entirely on one side—whether, allowing for the utmost uncertainty on other points of the criticism to which he appeals, there is any reasonable doubt that the Lord's Prayer and the Sermon on the Mount afford a true account of our Lord's essential belief and cardinal teaching.†

I certainly was not aware that I had evaded the questions here stated; indeed, I should say that I have indicated my reply to them pretty clearly; but, as Dr. Wace wants a plainer answer, he shall certainly be gratified. If, as Dr. Wace declares it is, his "whole case is involved in" the argument as stated in the latter of these two extracts, so much the worse for his whole case. For I am of opinion that there is the gravest reason for doubting whether the "Sermon on the Mount" was ever preached, and whether the so-called "Lord's Prayer" was ever prayed by Jesus of Nazareth. My reasons for this opinion are, among others, these: There is now no doubt that the three synoptic Gospels, so far from being the work of three independent writers, are closely inter-dependent,‡ and that in one of two ways. Either all three contain, as their foundation, versions, to a large extent verbally identical, of one and the same tradition; or two of them are thus closely dependent on the third; and the opinion of the majority of the best critics has, of late years, more and more converged toward the conviction that our canonical second Gospel (the so-called "Mark's" Gospel) is that which most closely represents the primitive groundwork of the three.‡‡ That I take to be one of the most valid results of New Testament criticism, of immeasurably greater importance than the discussion about dates and authorship.

But if, as I believe to be the case, beyond any rational doubt or dispute, the second Gospel is the nearest extant representative of the oldest tradition, whether written or oral, how comes it that it contains neither the "Sermon on the Mount" nor the "Lord's Prayer," those typical embodiments, according to Dr. Wace, of the "essential belief and cardinal teaching" of Jesus? Not only does "Mark's" Gospel fail to contain the "Sermon on the Mount," or anything but a very few of the sayings contained in that collection; but, at the point of

* Page 33.

† Page 34.

‡ I suppose this is what Dr. Wace is thinking about when he says that I allege that there "is no visible escape" from the supposition of an "Ur-Marcus" (p. 82). That a "theologian of repute" should confound an indisputable fact with one of the modes of explaining that fact, is not so singular as those who are unaccustomed to the ways of theologians might imagine.

‡‡ Any examiner whose duty it has been to examine into a case of "copying" will be particularly well prepared to appreciate the force of the case stated in that most excellent little book, "The Common Tradition of the Synoptic Gospels," by Dr. Abbott and Mr. Rushbrooke (Macmillan, 1884). To those who have not passed through such painful experiences I may recommend the brief discussion of the genuineness of the "Casket Letters" in my friend Mr. Skelton's interesting book, "Maitland of Lethington." The second edition of Holtzmann's "Lehrbuch," published in 1886, gives a remarkably fair and full account of the present results of criticism. At page 366 he writes that the present burning question is whether the "relatively primitive narration and the root of the other synoptic texts is contained in Matthew or in Mark. It is only on this point that properly informed (*sachkundige*) critics differ," and he decides in favor of Mark.

the history of Jesus where the "Sermon" occurs in "Matthew," there is in "Mark" an apparently unbroken narrative, from the calling of James and John to the healing of Simon's wife's mother. Thus the oldest tradition not only ignores the "Sermon on the Mount," but, by implication, raises a probability against its being delivered when and where the later "Matthew" inserts it in his compilation.

And still more weighty is the fact that the third Gospel, the author of which tells us that he wrote after "many" others had "taken in hand" the same enterprise; who should therefore have known the first Gospel (if it existed), and was bound to pay to it the deference due to the work of an apostolic eye-witness (if he had any reason for thinking it was so)—this writer, who exhibits far more literary competence than the other two, ignores any "Sermon on the Mount," such as that reported by "Matthew," just as much as the oldest authority does. Yet "Luke" has a great many passages identical, or parallel, with those in "Matthew's" "Sermon on the Mount," which are, for the most part, scattered about in a totally different connection.

Interposed, however, between the nomination of the apostles and a visit to Capernaum; occupying, therefore, a place which answers to that of the "Sermon on the Mount" in the first Gospel, there is, in the third Gospel, a discourse which is as closely similar to the "Sermon on the Mount" in some particulars, as it is widely unlike it in others.

This discourse is said to have been delivered in a "plain" or "level place" (Luke vi, 17), and by way of distinction we may call it the "Sermon on the Plain."

I see no reason to doubt that the two evangelists are dealing, to a considerable extent, with the same traditional material; and a comparison of the two "sermons" suggests very strongly that "Luke's" version is the earlier. The correspondence between the two forbid the notion that they are independent. They both begin with a series of blessings, some of which are almost verbally identical. In the middle of each (Luke vi, 27-38, Matthew v, 43-48) there is a striking exposition of the ethical spirit of the command given in Leviticus xix, 18. And each ends with a passage containing the declaration that a tree is to be known by its fruit, and the parable of the house built on the sand. But while there are only twenty-nine verses in the "Sermon on the Plain," there are one hundred and seven in the "Sermon on the Mount"; the excess in length of the latter being chiefly due to the long interpolations, one of thirty verses before, and one of thirty-four verses after, the middlemost parallelism with Luke. Under these circumstances, it is quite impossible to admit that there is more probability that "Matthew's" version of the sermon is historically accurate than there is that Luke's version is so; and they can not both be accurate.

"Luke" either knew the collection of loosely connected and aphoristic utterances which appear under the name of the "Sermon on the Mount" in "Matthew," or he did not. If he did not, he must have been ignorant of the existence of such a document as our canonical "Matthew," a fact which does not make for the genuineness or the authority of that book. If he did, he has shown that he does not care for its authority on a matter of fact of no small importance; and that does not permit us to conceive that he believed the first Gospel

to be the work of an authority to whom he ought to defer, let alone that of an apostolic eye-witness.

The tradition of the Church about the second Gospel, which I believe to be quite worthless, but which is all the evidence there is for "Mark's" authorship, would have us believe that "Mark" was little more than the mouth-piece of the apostle Peter. Consequently, we are to suppose that Peter either did not know, or did not care very much for, that account of the "essential belief and cardinal teaching" of Jesus which is contained in the Sermon on the Mount; and, certainly, he could not have shared Dr. Wace's view of its importance.*

I thought that all fairly attentive and intelligent students of the Gospels, to say nothing of theologians of reputation, knew these things. But how can any one who does know them have the conscience to ask whether there is "any reasonable doubt" that the Sermon on the Mount was preached by Jesus of Nazareth? If conjecture is permissible, where nothing else is possible, the most probable conjecture seems to be that "Matthew," having a *cento* of sayings attributed—rightly or wrongly it is impossible to say—to Jesus, among his materials, thought they were, or might be, records of a continuous discourse, and put them in at the place he thought likeliest. Ancient historians of the highest character saw no harm in composing long speeches which never were spoken, and putting them into the mouths of statesmen and warriors; and I presume that whoever is represented by "Matthew" would have been grievously astonished to find that any one objected to his following the example of the best models accessible to him.

So with the "Lord's Prayer." Absent in our representative of the oldest tradition, it appears in both "Matthew" and "Luke." There is reason to believe that every pious Jew, at the commencement of our era, prayed three times a day, according to a formula which is embodied in the present *Schmone-Ésre†* of the Jewish prayer-book. Jesus, who was assuredly in all respects, a pious Jew, whatever else he may have been, doubtless did the same. Whether he modified the current formula, or whether the so-called "Lord's Prayer" is the prayer substituted for the *Schmone-Ésre* in the congregations of the Gentiles, who knew nothing of the Jewish practice, is a question which can hardly be answered.

In a subsequent passage of Dr. Wace's article ‡ he adds to the list of verities which he imagines to be unassailable, "The story of the Passion." I am not quite sure what he means by this—I am not aware that anyone (with the exception of certain ancient heretics) has propounded doubts as to the reality of the crucifixion; and certainly I have no inclination to argue about the precise accuracy of every detail of that pathetic story of suffering and wrong. But, if Dr. Wace means, as I suppose he does, that that which, according to the orthodox view, happened after the crucifixion, and which is, in a dogmatic

*Holtzmann ("Die synoptischen Evangelien," 1863, p. 75), following Ewald, argues that the "Source A" (—the threefold tradition, more or less) contained something that answered to the "Sermon on the Plain" immediately after the words of our present Mark. "And he cometh into a house" (iii. 19). But what conceivable motive could "Mark" have for omitting it? Holtzmann has no doubt, however, that the "Sermon on the Mount" is a compilation, or, as he calls it in his recently published "Lehrbuch" (p. 272), "an artificial mosaic work."

†See Schürer, "Geschichte des jüdischen Volkes," Zweiter Theil, p. 384.

‡Page 4.

sense, the most important part of the story, is founded on solid historical proofs, I must beg leave to express a diametrically opposite conviction.

What do we find when the accounts of the events in question, contained in the three synoptic Gospels, are compared together? In the oldest, there is a simple, straightforward statement which, for anything that I have to urge to the contrary, may be exactly true. In the other two, there is, round this possible and probable nucleus, a mass of accretions of the most questionable character.

The cruelty of death by crucifixion depended very much upon its lingering character. If there were a support for the weight of the body, as not unfrequently was the case, the pain during the first hours of the infliction was not, necessarily, extreme; nor need any serious physical symptoms at once arise from the wounds made by the nails in the hands and feet, supposing they were nailed, which was not invariably the case. When exhaustion set in, and hunger, thirst, and nervous irritation had done their work, the agony of the sufferer must have been terrible; and the more terrible that, in the absence of any effectual disturbance of the machinery of physical life, it might be prolonged for many hours or even days. Temperate, strong men, such as the ordinary Galilean peasants were, might live for several days on the cross. It is necessary to bear these facts in mind when we read the account contained in the fifteenth chapter of the second Gospel.

Jesus was crucified at the third hour (xv, 25), and the narrative seems to imply that he died immediately after the ninth hour (v. 34). In this case he would have been crucified only six hours; and the time spent on the cross can not have been much longer, because Joseph of Arimathea must have gone to Pilate, made his preparations, and deposited the body in the rock-cut tomb before sunrise, which, at that time of the year was about the twelfth hour. That any one should die after only six hours' crucifixion could not have been at all in accordance with Pilate's large experience in the effects of that method of punishment. It, therefore quite agrees with what might be expected if Pilate "marveled if he were already dead," and required to be satisfied on this point by the testimony of the Roman officer who was in command of the execution party. Those who paid attention to the extraordinarily difficult question, What are the indisputable signs of death?—will be able to estimate the value of the opinion of a rough soldier on such a subject; even if his report to the procurator were in no wise affected by the fact that the friend of Jesus, who anxiously awaited his answer, was a man of influence and of wealth.

The inanimate body, wrapped in linen, was deposited in a spacious,* cool, rock chamber, the entrance of which was closed, not by a well-fitting door, but by a stone rolled against the opening, which would of course allow free passage of air. A little more than thirty-six hours afterward (Friday 6 P. M., to Sunday 6 A. M., or a little after) three women visit the tomb and find it empty. And they are told by a young man "arrayed in a white robe" that Jesus has gone to his native country of Galilee, and that the disciples and Peter will find him there.

*Spacious, because a young man could sit in it "on the right side" (xv, 5), and therefore with plenty of room to spare.

Thus it stands, plainly recorded, in the oldest tradition that, for any evidence to the contrary, the sepulchre might have been vacated at any time during the Friday or Saturday nights. If it is said that no Jew would have violated the Sabbath by taking the former course, it is to be recollected that Joseph of Arimathea might well be familiar with that wise and liberal interpretation of the fourth commandment, which permitted works of mercy to men—nay even the drawing of an ox or an ass out of a pit—on the Sabbath. At any rate, the Saturday night was free to the most scrupulous observers of the law.

These are the facts of the case as stated by the oldest extant narrative of them. I do not see why any one should have a word to say against the inherent probability of that narrative; and, for my part, I am quite ready to accept it as an historical fact, that so much and no more is positively known of the end of Jesus of Nazareth. On what grounds can a reasonable man be asked to believe any more? So far as the narrative in the first Gospel, on the one hand, and those in the third Gospel and the Acts, on the other go beyond what is stated in the second Gospel, they are hopelessly discrepant with one another. And this is the more significant because the pregnant phrase "some doubted," in the first Gospel, is ignored in the third.

But it is said that we have the witness Paul speaking to us directly in the Epistles. There is little doubt that we have, and a very singular witness he is. According to his own showing, Paul, in the vigor of his manhood, with every means of becoming acquainted, at first hand, with the evidence of eye-witnesses, not merely refused to credit them, but "persecuted the church of God and made havoc of it." The reasoning of Stephen fell dead upon the acute intellect of this zealot for the traditions of his fathers: his eyes were blind to the ecstatic illumination of the martyr's countenance "as it had been the face of an angel"; and when, at the words "Behold, I see the heavens opened and the Son of man standing on the right hand of God," the murderous mob rushed upon and stoned the rapt disciple of Jesus, Paul ostentatiously made himself their official accomplice.

Yet this strange man, because he has a vision one day, at once, and with equally headlong zeal, flies to the opposite pole of opinion. And he is most careful to tell us that he abstained from any re-examination of the facts.

Immediately I conferred not with flesh and blood; neither went I up to Jerusalem to them which were apostles before me; but I went away into Arabia. (Galatians i, 16, 17.)

I do not presume to quarrel with Paul's procedure. If it satisfied him, that was his affair; and, if it satisfies any one else, I am not called upon to dispute the right of that person to be satisfied. But I certainly have the right to say that it would not satisfy me in like case; that I should be very much ashamed to pretend that it could, or ought to, satisfy me; and that I can entertain but a very low estimate of the value of the evidence of people who are to be satisfied in this fashion, when questions of objective fact, in which their faith is interested, are concerned. So that, when I am called upon to believe a great deal more than the oldest Gospel tells me about the final events of the history of Jesus on the authority of Paul (1 Corinthians xv, 5-8), I must pause. Did he think it, at any subsequent time, worth while "to confer with flesh and blood," or, in modern phrase, to re-examine the facts for himself? or was he ready to accept anything that fitted in with his preconceived ideas? Does he mean, when he speaks of

all the appearances of Jesus after the crucifixion as if they were of the same kind, that they were all visions, like the manifestation to himself? And, finally, how is this account to be reconciled with those in the first and the third Gospels—which, as we have seen, disagree with one another?

Until these questions are satisfactorily answered, I am afraid that, so far as I am concerned, Paul's testimony can not be seriously regarded, except as it may afford evidence of the state of traditional opinion at the time at which he wrote, say between 55 and 60 A. D.; that is, more than twenty years after the event; a period much more than sufficient for the development of any amount of mythology about matters of which nothing was really known. A few years later, among the contemporaries and neighbors of the Jews, and if the most probable interpretation of the Apocalypse can be trusted, among the followers of Jesus also, it was fully believed, in spite of all evidence to the contrary, that the Emperor Nero was not really dead, but that he was hidden away somewhere in the East, and would speedily come again at the head of a great army, to be revenged upon his enemies.

Thus, I conceive that I have shown cause for the opinion that Dr. Wace's challenge touching the Sermon on the Mount, the Lord's Prayer, and the Passion, was more valorous than discreet. After all this discussion I am still at the agnostic point. Tell me, first, what Jesus can be proved to have been, said, and done, and I will tell you whether I believe him, or in him,* or not! As Dr. Wace admits that I have dissipated his lingering shade of unbelief about the bedevilment of the Gadarene pigs, he might have done something to help mine. Instead of that, he manifests a total want of conception of the nature of the obstacles which impede the conversion of his "infidels."

The truth I believe to be, that the difficulties in the way of arriving at a sure conclusion as to these matters, from the Sermon on the Mount, the Lord's Prayer, or any other data offered by the synoptic Gospels (and *a fortiori* from the fourth Gospel) are insuperable. Every one of these records is colored by the prepossessions of those among whom the primitive traditions arose and of those by whom they were collected and edited; and the difficulty of making allowance for these prepossessions is enhanced by our ignorance of the exact dates at which the documents were first put together; of the extent to which they have been subsequently worked over and interpolated; and of the historical sense, or want of sense, and the dogmatic tendencies, of their compilers and editors. Let us see if there is any other road which will take us into something better than negation.

There is a wide-spread notion that the "primitive Church," while under the guidance of the apostles and their immediate successors, was a sort of dogmatic dove-cote, pervaded by the most loving unity and doctrinal harmony. Protestants, especially, are fond of attributing to themselves the merit of being nearer "the Church of the apostles" than their neighbors; and they are the less to be excused for their strange delusion because they are great readers of the documents which prove the exact contrary. The fact is that, in the course of the first three centuries of its existence, the Church rapidly under-

*I am very sorry for the interpolated "in," because citation ought to be accurate in small things as in great. But what difference it makes whether one "believes Jesus" or "believes in Jesus" much thought has not enabled me to discover. If you "believe him" you must believe him to be what he professed to be—that is, "believe in him"; and if you "believe in him" you must necessarily "believe him."

went a process of evolution of the most remarkable character, the final stage of which is far more different from the first than Anglicanism is from Quakerism. The key to the comprehension of the problem of the origin of what is now called "Christianity," and its relation to Jesus of Nazareth, lies here. Nor can we arrive at any sound conclusion as to what it is probable that Jesus actually said and did without being clear on this head. By far the most important and subsequently influential steps in the evolution of Christianity took place in the course of the century, more or less, which followed upon the crucifixion. It is almost the darkest period of Church history, but, most fortunately, the beginning and the end of the period are brightly illuminated by the contemporary evidence of two writers of whose historical existence there is no doubt,* and against the genuineness of whose most important works there is no widely admitted objection. These are Justin, the philosopher and martyr, and Paul, the Apostle to the Gentiles. I shall call upon these witnesses only to testify to the condition of opinion among those who called themselves disciples of Jesus in their time.

Justin, in his dialogue with Trypho the Jew, which was written somewhere about the middle of the second century, enumerates certain categories of persons who, in his opinion, will, or will not, be saved.† These are:

1. Orthodox Jews who refuse to believe that Jesus is the Christ. *Not saved.*

2. Jews who observe the law; believe Jesus to be the Christ; but who insist on the observance of the law by Gentile converts. *Not saved.*

3. Jews who observe the law; believe Jesus to be the Christ, and hold that Gentile converts need not observe the law. *Saved* (in Justin's opinion; but some of his fellow-Christians think the contrary).

4. Gentile converts to the belief in Jesus as the Christ, who observe the law. *Saved* (possibly).

5. Gentile believers in Jesus as the Christ, who do not observe the law themselves (except so far as the refusal of idol sacrifices), but do not consider those who do observe it heretics. *Saved* (this is Justin's own view).

6. Gentile believers who do not observe the law except in refusing idol sacrifices, and hold those who do observe it to be heretics. *Saved.*

7. Gentiles who believe Jesus to be the Christ and call themselves Christians, but who eat meats sacrificed to idols. *Not saved.*

8. Gentiles who disbelieve in Jesus as the Christ. *Not saved.*

Justin does not consider Christians who believe in the natural birth of Jesus, of whom he implies that there is a respectable minority, to be heretics, though he himself strongly holds the preternatural birth of Jesus and his pre-existence as the "Logos" or "Word." He conceives the Logos to be a second God, inferior to the first, unknowable, God, with respect to whom Justin, like Philo, is a complete agnostic. The Holy Spirit is not regarded by Justin as a separate personality, and is often mixed up with the "Logos." The doctrine of the nat-

* True for Justin; but there is a school of theological critics, who more or less question the historical reality of Paul and the genuineness of even the four cardinal epistles.

† See "Dial. cum Tryphone," sections 47 and 35. It is to be understood that Justin does not arrange these categories in order as I have done.

ural immortality of the soul is, for Justin, a heresy; and he is as firm a believer in the resurrection of the body as in the speedy second coming and the establishment of the millennium.

This pillar of the Church in the middle of the second century—a much-traveled native of Samaria—was certainly well acquainted with Rome, probably with Alexandria, and it is likely that he knew the state of opinion throughout the length and breadth of the Christian world as well as any man of his time. If the various categories above enumerated are arranged in a series thus—

Justin's Christianity.

<i>Orthodox Judaism.</i>	<i>Judæo-Christianity.</i>					<i>Idolothytic Christianity.</i>	<i>Paganism.</i>
I	II	III	IV	V	VI	VII	VIII

it is obvious that they form a gradational series from orthodox Judaism, on the extreme left, to paganism, whether philosophic or popular, on the extreme right; and it will further be observed that, while Justin's conception of Christianity is very broad, he rigorously excludes two classes of persons who, in his time, called themselves Christians; namely, those who insist on circumcision and other observances of the law on the part of Gentile converts; that is to say, the strict Judæo-Christians (II), and on the other hand, those who assert the lawfulness of eating meat offered to idols—whether they are gnostics or not (VII). These last I have called "idolothytic" Christians, because I can not devise a better name, not because it is strictly defensible etymologically.

At the present moment I do not suppose there is an English missionary in any heathen land who would trouble himself whether the materials of his dinner had been previously offered to idols or not. On the other hand, I suppose there is no Protestant sect within the pale of orthodoxy, to say nothing of the Roman and Greek Churches, which would hesitate to declare the practice of circumcision and the observance of the Jewish Sabbath and dietary rules, shockingly heretical.

Modern Christianity has, in fact, not only shifted far to the right of Justin's position, but it is of much narrower compass.

Justin.

<i>Judaism.</i>	<i>Judæo-Christianity.</i>				<i>Modern Christianity.</i>		<i>Paganism.</i>
I	II	III	IV	V	VI	VII	VIII

For, though it includes VII, and even, in saint and relic worship, cuts a "monstrous cantle" out of paganism, it excludes, not only all Judæo-Christians, but all who doubt that such are heretics. Ever since the thirteenth century, the Inquisition would have cheerfully burned, and in Spain did abundantly burn, all persons who came under the categories II, III, IV, V. And the wolf would play the same havoc now if it could only get its blood-stained jaws free from the muzzle imposed by the secular arm.

Further, there is not a Protestant body except the Unitarian, which would not declare Justin himself a heretic, on account of his doctrine of the inferior godship of the Logos; while I am very much afraid that, in strict logic, Dr. Wace would be under the necessity, so painful to him, of calling him an "infidel," on the same and on other grounds.

Now let us turn to our other authority. If there is any result of critical investigations of the sources of Christianity which is certain,* it is that Paul of Tarsus wrote the Epistle to the Galatians somewhere between the years 55 and 60 A. D., that is to say, roughly, twenty, or five-and-twenty, years after the crucifixion. If this is so, the Epistle to the Galatians is one of the oldest, of extant documentary evidences of the state of the primitive Church. And, be it observed, if it is Paul's writing, it unquestionably furnishes us with the evidence of a participator in the transactions narrated. With the exception of two or three of the other Pauline epistles, there is not one solitary book in the New Testament of the authorship and authority of which we have such good evidence.

And what is the state of things we find disclosed? A bitter quarrel, in his account of which Paul by no means minces matters or hesitates to hurl defiant sarcasms against those who were "reputed to be pillars": James, "the brother of the Lord," Peter, the rock on whom Jesus is said to have built his Church, and John, "the beloved disciple." And no deference toward "the rock" withholds Paul from charging Peter to his face with "dissimulation."

The subject of the hot dispute was simply this: Were Gentile converts bound to obey the law or not? Paul answered in the negative; and, acting upon his opinion, had created at Antioch (and elsewhere) a specifically "Christian" community, the sole qualifications for admission into which were the confession of the belief that Jesus was the Messiah, and baptism upon that confession. In the epistle in question, Paul puts this—his "gospel," as he calls it—in its most extreme form. Not only does he deny the necessity of conformity with the law, but he declares such conformity to have a negative value. "Behold, I, Paul, say unto you, that if ye receive circumcision, Christ will profit you nothing" (Galatians v, 2). He calls the legal observances "beggarly rudiments," and anathematizes every one who preaches to the Galatians any other gospel than his own—that is to say, by direct consequence, he anathematizes the Jerusalem Nazarenes whose zeal for the law is testified by James in a passage of the Acts cited further on. In the first Epistle to the Corinthians, dealing with the question of eating meat offered to idols, it is clear that Paul himself thinks it a matter of indifference; but he advises that it should not be done, for the sake of the weaker brethren. On the other hand, the Nazarenes of Jerusalem most strenuously opposed Paul's "gospel," insisting on every convert becoming a regular Jewish proselyte, and consequently on his observance of the whole law; and this party was led by James and Peter and John (Galatians ii, 9). Paul does not suggest that the question of principle was settled by the discussion referred to in Galatians. All he says is that it ended in the practical agreement that he and Barnabas should do as they had been doing in respect of the Gentiles; while James and Peter and John should deal in their own fashion with Jewish converts. Afterward he complains bitterly of Peter, because, when on a visit to Antioch, he at first inclined to Paul's view, and ate with the Gentile converts; but when "certain came from James," drew back, and separated himself, fearing them that were of the circumcision. And the rest of the Jews dissembled likewise with him; insomuch that even

* I guard myself against being supposed to affirm that even the four cardinal epistles of Paul may not have been seriously tampered with. See note on page 37.

Barnabas was carried away with their dissimulation" (Galatians ii, 12, 13).

There is but one conclusion to be drawn from Paul's account of this famous dispute, the settlement of which determined the fortunes of the nascent religion. It is that the disciples at Jerusalem, headed by "James, the Lord's brother," and by the leading apostles, Peter and John, were strict Jews, who objected to admit any converts to their body, unless these, either by birth or by becoming proselytes, were also strict Jews. In fact, the sole difference between James and Peter and John, with the body of disciples whom they led, and the Jews by whom they were surrounded, and with whom they for many years shared the religious observances of the Temple, was that they believed that the Messiah, whom the leaders of the nation yet looked for, had already come in the person of Jesus of Nazareth.

The Acts of the Apostles is hardly a very trustworthy history; it is certainly of later date than the Pauline epistles, supposing them to be genuine. And the writer's version of the conference of which Paul gives so graphic a description, if that is correct, is unmistakably colored with all the art of a reconciler, anxious to cover up a scandal. But it is none the less instructive on this account. The judgment of the "council" delivered by James is that the Gentile converts shall merely "abstain from things sacrificed to idols, and from blood and from things strangled, and from fornication." But notwithstanding the accommodation in which the writer of the Acts would have us believe, the Jerusalem church held to its endeavor to retain the observance of the law. Long after the conference, some time after the writing of the Epistles to the Galatians and Corinthians, and immediately after the dispatch of that to the Romans, Paul makes his last visit to Jerusalem, and presents himself to James and all the elders. And this is what the Acts tells us of the interview:

And they said unto him; Thou seest, brother, how many thousands (or myriads) there are among the Jews of them which have believed; and they are all zealous for the law: and they have been informed concerning thee, that thou teachest all the Jews which are among the Gentiles to forsake Moses, tell them not to circumcise their children, neither to walk after the customs (Acts xxi, 20, 21).

They therefore request that he should perform a certain public religious act in the Temple, in order that

all shall know that there is no truth in the things whereof they have been informed concerning thee; but that thou thyself walkest orderly, keeping the law (ibid., 24).

How far Paul could do what he is here requested to do, and which the writer of the Acts goes on to say he did, with a clear conscience, if he wrote the epistles to the Galatians and Corinthians, I may leave any candid reader of those epistles to decide. The point to which I wish to direct attention is the declaration that the Jerusalem church, led by the brother of Jesus and by his personal disciples and friends, twenty years and more after his death, consisted of strict and zealous Jews.

Tertullus, the orator, caring very little about the internal dissensions of the followers of Jesus, speaks of Paul as a "ringleader of the sect of the Nazarenes" (Acts xxiv, 5), which must have affected James much in the same way as it would have moved the Archbishop of Canterbury, in George Fox's day, to hear the latter called a "ringleader of the sect of Anglicans." In fact, "Nazarene" was, as is well known, the distinctive appellation applied to Jesus; his immediate followers were known as Nazarenes, while the congregation of the disciples, and, later, of converts at Jerusalem—the Jerusalem church—

was emphatically the "sect of the Nazarenes," no more in itself to be regarded as anything outside Judaism than the sect of the Sadducees or of the Essenes.* In fact, the tenets of both the Sadducees and the Essenes diverged much more widely from the Pharisaic standard of orthodoxy than Nazarenism did.

Let us consider the position of affairs now (A. D. 50-60) in relation to that which obtained in Justin's time, a century later. It is plain that the Nazarenes—presided over by James "the brother of the Lord," and comprising within their body all the twelve apostles—belonged to Justin's second category of "Jews who observe the law, believe Jesus to be the Christ, but who insist on the observance of the law by Gentile converts," up till the time at which the controversy reported by Paul arose. They then, according to Paul, simply allowed him to form his congregation of non-legal Gentile converts at Antioch and elsewhere; and it would seem that it was to these converts, who would come under Justin's fifth category, that the title of "Christian" was first applied. If any of these Christians had acted upon the more than half-permission given by Paul, and had eaten meats offered to idols, they would have belonged to Justin's seventh category.

Hence, it appears that, if Justin's opinion, which was doubtless that of the Church generally in the middle of the second century, was correct, James and Peter and John and their followers could not be saved; neither could Paul, if he carried into practice his views as to the indifference of eating meats offered to idols. Or, to put the matter another way, the center of gravity of orthodoxy, which is at the extreme right of the series in the nineteenth century, was at the extreme left, just before the middle of the first century, when the "sect of the Nazarenes" constituted the whole church founded by Jesus and the apostles; while, in the time of Justin, it lay midway between the two. It is therefore a profound mistake to imagine that the Judæo-Christians (Nazarenes and Ebionites) of later times were heretical outgrowths from a primitive, universalist "Christianity." On the contrary, the universalist "Christianity" is an outgrowth from the primitive, purely Jewish, Nazarenism; which, gradually eliminating all the ceremonial and dietary parts of the Jewish law, has thrust aside its parent, and all the intermediate stages of its development, into the position of damnable heresies.

Such being the case, we are in a position to form a safe judgment of the limits within which the teaching of Jesus of Nazareth must have been confined. Ecclesiastical authority would have us believe that the words which are given at the end of the first Gospel, "Go ye, therefore, and make disciples of all the nations, baptizing them in the name of the Father and of the Son and of the Holy Ghost," are part of the last commands of Jesus, issued at the moment of his parting with the eleven. If so, Peter and John must have heard these words; they are too plain to be misunderstood; and the occasion is too solemn for them to be ever forgotten. Yet the "Acts" tells us that Peter needed a vision to enable him so much as to baptize Cornelius; and Paul, in the Galatians, knows nothing of words which would have completely borne him out as against those who, though they

* All this was quite clearly pointed out by Ritschl nearly forty years ago. See "*Die Entstehung der alt-katholischen Kirche*" (1850), p. 108.

heard, must be supposed to have either forgotten or ignored them. On the other hand, Peter and John, who are supposed to have heard the "Sermon on the Mount," know nothing of the saying that Jesus had not come to destroy the law, but that every jot and tittle of the law must be fulfilled, which surely would have been pretty good evidence for their view of the question.

We are sometimes told that the personal friends and daily companions of Jesus remained zealous Jews and opposed Paul's innovations, because they were hard of heart and dull of comprehension. This hypothesis is hardly in accordance with the concomitant faith of those who adopt it, in the miraculous insight and superhuman sagacity of their Master; nor do I see any way of getting it to harmonize with the other orthodox postulate; namely, that Matthew was the author of the first Gospel and John of the fourth. If that is so, then, most assuredly, Matthew was no dullard; and as for the fourth Gospel—a theosophic romance of the first order—it could have been written by none but a man of remarkable literary capacity, who had drunk deep of Alexandrian philosophy. Moreover, the doctrine of the writer of the fourth Gospel is more remote from that of the "sect of the Nazarenes" than is that of Paul himself. I am quite aware that orthodox critics have been capable of maintaining that John, the Nazarene, who was probably well past fifty years of age when he is supposed to have written the most thoroughly Judaizing book in the New Testament—the Apocalypse—in the roughest of Greek, underwent an astounding metamorphosis of both doctrine and style by the time he reached the ripe age of ninety or so, and provided the world with a history in which the acutest critic can not make out where the speeches of Jesus end and the text of the narrative begins; while that narrative is utterly irreconcilable in regard to matters of fact with that of his fellow-apostle, Matthew.

The end of the whole matter is this: The "sect of the Nazarenes," the brother and the immediate followers of Jesus, commissioned by him as apostles, and those who were taught by them up to the year 50 A. D., were not "Christians" in the sense in which that term has been understood ever since its asserted origin at Antioch, but Jews—strict orthodox Jews—whose belief in the Messiahship of Jesus never led to their exclusion from the Temple services, nor would have shut them out from the wide embrace of Judaism.* The open proclamation of their special view about the Messiah was doubtless offensive to the Pharisees, just as rampant Low Churchism is offensive to bigoted High Churchism in our own country; or as any kind of dissent is offensive to fervid religionists of all creeds. To the Sadducees, no doubt, the political danger of any Messianic movement was serious, and they would have been glad to put down Nazarenism, lest it should end in useless rebellion against their Roman masters, like that other Galilean movement headed by Judas, a generation earlier. Galilee was always a hot-bed of seditious enthusiasm against the rule of Rome; and high priest and procurator alike had need to keep a sharp eye upon natives of that district. On the whole, however, the Nazarenes were but little troubled for the first twenty years of their existence; and the undying hatred of the Jews against those later

* "If every one was baptized as soon as he acknowledged Jesus to be the Messiah, the first Christians can have been aware of no other essential differences from the Jews."—Zeller "Vorträge" (1865), p. 216.

converts whom they regarded as apostates and fautors of a sham Judaism was awakened by Paul. From their point of view, he was a mere renegade Jew, opposed alike to orthodox Judaism and to orthodox Nazarenism, and whose teachings threatened Judaism with destruction. And, from their point of view, they were quite right. In the course of a century, Pauline influences had a large share in driving primitive Nazarenism from being the very heart of the new faith into the position of scouted error; and the spirit of Paul's doctrine continued its work of driving Christianity further and further away from Judaism, until "meats offered to idols" might be eaten without scruple, while the Nazarene methods of observing even the Sabbath or the Passover were branded with the mark of Judaizing heresy.

But if the primitive Nazarenes of whom the Acts speaks were orthodox Jews, what sort of probability can there be that Jesus was anything else? How can he have founded the universal religion which was not heard of till twenty years after his death? * That Jesus possessed in a rare degree the gift of attaching men to his person and to his fortunes; that he was the author of many a striking saying, and the advocate of equity, of love, and of humility; that he may have disregarded the subtleties of the bigots for legal observance, and appealed rather to those noble conceptions of religion which constituted the pith and kernel of the teaching of the great prophets of his nation seven hundred years earlier; and that, in the last scenes of his career, he may have embodied the ideal sufferer of Isaiah—may be, as I think it is, extremely probable. But all this involves not a step beyond the borders of orthodox Judaism. Again, who is to say whether Jesus proclaimed himself the veritable Messiah, expected by his nation since the appearance of the pseudo-prophetic work of Daniel, a century and a half before his time; or whether the enthusiasm of his followers gradually forced him to assume that position?

But one thing is quite certain: if that belief in the speedy second coming of the Messiah which was shared by all parties in the primitive Church, whether Nazarene or Pauline; which Jesus is made to prophesy, over and over again, in the synoptic Gospels; and which dominated the life of Christians during the first century after the crucifixion—if he believed and taught that, then assuredly he was under an illusion, and he is responsible for that which the mere effluxion of time has demonstrated to be a prodigious error.

When I ventured to doubt "whether any Protestant theologian who has a reputation to lose will say that he believes the Gadarene story," it appears that I reckoned without Dr. Wace, who, referring to this passage in my paper, says:

He will judge whether I fall under his description; but I repeat that I believe it, and that he has removed the only objection to my believing it.†

Far be from me to set myself up as a judge of any such delicate question as that put before me; but I think I may venture to express the conviction that, in the matter of courage, Dr. Wace has raised for himself a monument *ære perennius*. For, really, in my poor judg-

* Dr. Harnack, in the lately published second edition of his "Dogmengeschichte," says (p. 39), "Jesus Christ brought forward no new doctrine"; and again (p. 65), "It is not difficult to set against every portion of the utterances of Jesus an observation which deprives him of originality." See also Zusatz 4, on the same page.

ment, a certain splendid intrepidity, such as one admires in the leader of a forlorn hope, is manifested by Dr. Wace, when he solemnly affirms that he believes the Gadarene story on the evidence offered. I feel less complimented perhaps than I ought to do, when I am told that I have been an accomplice in extinguishing in Dr. Wace's mind the last glimmer of doubt which common sense may have suggested. In fact, I must disclaim all responsibility for the use to which the information I supplied has been put. I formally decline to admit that the expression of my ignorance whether devils, in the existence of which I do not believe, if they did exist, might or might not be made to go out of men into pigs, can, as a matter of logic, have been of any use whatever to a person who already believed in devils and in the historical accuracy of the Gospels.

Of the Gadarene story, Dr. Wace, with all solemnity and twice over, affirms that he "believes it." I am sorry to trouble him further, but what does he mean by "it"? Because there are two stories, one in "Mark" and "Luke," and the other in "Matthew." In the former, which I quoted in my previous paper, there is one possessed man; in the latter there are two. The story is told fully, with the vigorous, homely diction and the picturesque details of a piece of folk-lore, in the second Gospel. The immediately antecedent event is the storm on the Lake of Gennesareth. The immediately consequent events are the message from the ruler of the synagogue and the healing of the woman with an issue of blood. In the third Gospel, the order of events is exactly the same, and there is an extremely close general and verbal correspondence between the narratives of the miracle. Both agree in stating that there was only one possessed man, and that he was the residence of many devils, whose name was "Legion."

In the first Gospel, the event which immediately precedes the Gadarene affair is, as before, the storm; the message from the ruler and the healing of the issue are separated from it by the accounts of the healing of a paralytic, of the calling of Matthew, and of a discussion with some Pharisees. Again, while the second Gospel speaks of the country of the "Gerasenes" as the locality of the event, the third Gospel has "Gerasenes," "Gergesenes," and "Gadarenes" in different ancient MSS.; while the first has "Gadarenes."

The really important points to be noticed, however, in the narrative of the first Gospel, are these—that there are two possessed men instead of one; and that while the story is abbreviated by omissions, what there is of it is often verbally identical with the corresponding passages in the other two Gospels. The most unabashed of reconcilers can not well say that one man is the same as two, or two as one; and, though the suggestion really has been made, that two different miracles, agreeing in all essential particulars, except the number of the possessed, were effected immediately after the storm on the lake, I should be sorry to accuse any one of seriously adopting it. Nor will it be pretended that the allegory refuge is accessible in this particular case.

So, when Dr. Wace says that he believes in the synoptic evangelists' account of the miraculous bedevilment of swine, I may fairly ask which of them does he believe? Does he hold by the one evangelist's story, or by that of the two evangelists? And having made his election, what reasons has he to give for his choice? If it is suggested

that the witness of two is to be taken against that of one, not only is the testimony dealt with in that common-sense fashion against which theologians of his school protest so warmly; not only is all question of inspiration at an end, but the further inquiry arises, after all, is it the testimony of two against one? Are the authors of the versions in the second and the third Gospels really independent witnesses? In order to answer this question, it is only needful to place the English versions of the two side by side, and compare them carefully. It will then be seen that the coincidences between them, not merely in substance, but in arrangement, and in the use of identical words in the same order, are such, that only two alternatives are conceivable: either one evangelist freely copied from the other, or both based themselves upon a common source, which may either have been a written document, or a definite oral tradition learned by heart. Assuredly these two testimonies are not those of independent witnesses. Further, when the narrative in the first Gospel is compared with that in the other two, the same fact comes out.

Supposing, then, that Dr. Wace is right in his assumption that Matthew, Mark, and Luke wrote the works which we find attributed to them by tradition, what is the value of their agreement, even that something more or less like this particular miracle occurred, since it is demonstrable, either that all depend on some antecedent statement, of the authorship of which nothing is known, or that two are dependent upon the third?

Dr. Wace says he believes the Gadarene story; whichever version of it he accepts, therefore, he believes that Jesus said what he is stated in all the versions to have said, and thereby virtually declared that the theory of the nature of the spiritual world involved in the story is true. Now I hold that this theory is false, that it is a monstrous and mischievous fiction; and I unhesitatingly express my disbelief in any assertion that it is true, by whomsoever made. So that, if Dr. Wace is right in his belief, he is also quite right in classing me among the people he calls "infidels"; and although I can not fulfill the eccentric expectation of the Bishop of Peterborough, that I shall glory in a title which, from my point of view, it would be simply silly to adopt, I certainly shall rejoice not to be reckoned among the Bishop's "us Christians" so long as the profession of belief in such stories as the Gadarene pig affair, on the strength of a tradition of unknown origin, of which two discrepant reports, also of unknown origin, alone remain, forms any part of the Christian faith. And, although I have, more than once, repudiated the gift of prophecy, yet I think I may venture to express the anticipation, that if "Christians" generally are going to follow the line taken by the Bishop of Peterborough and Dr. Wace, it will not be long before all men of common sense qualify for a place among the "infidels."

VI.

CHRISTIANITY AND AGNOSTICISM.

By HENRY WACE, D. D.

READERS who may be willing to look at this further reply on my part to Prof. Huxley need not be apprehensive of being entangled in any such obscure points of church history as those with which the professor has found it necessary to perplex them in support of his contentions; still less of being troubled with any personal explanations. The tone which Prof. Huxley has thought fit to adopt, not only toward myself, but toward English theologians in general, excuses me from taking further notice of any personal considerations in the matter. I endeavored to treat him with the respect due to his great scientific position, and he replies by sneering at "theologians who are mere counsel for creeds," saying that the serious question at issue "is whether theological men of science, or theological special pleaders, are to have the confidence of the general public," observing that Holland and Germany are "the only two countries in which, at the present time, professors of theology are to be found whose tenure of their posts does not depend upon the result to which their inquiries lead them," and thus insinuating that English theologians are debarred by selfish interests from candid inquiry. I shall presently have something to say on the grave misrepresentation of German theology which these insinuations involve; but for myself and for English theologians I shall not condescend to reply to them. I content myself with calling the reader's attention to the fact that, in this controversy, it is Prof. Huxley who finds it requisite for his argument to insinuate that his opponents are biased by sordid motives; and I shall for the future leave him and his sneers out of account, and simply consider his arguments for as much, or as little, as they may be worth. For a similar reason I shall confine myself as far as possible to the issue which I raised at the Church Congress, and for which I then made myself responsible. I do not care, nor would it be of any avail, to follow over the wide and sacred field of Christian evidences an antagonist who resorts to the imputation of mean motives, and who, as I shall show, will not face the witnesses to whom he himself appeals. The manner in which Prof. Huxley has met the particular issue he challenged will be a sufficient illustration to impartial minds of the value which is to be attached to any further assaults which he may make upon the Christian position.

Let me then briefly remind the reader of the simple question which is at issue between us. What I alleged was that "an agnosticism which knows nothing of the relation of man to God must not only refuse belief to our Lord's most undoubted teaching, but must deny the reality of the spiritual convictions in which he lived and died." As evidence of that teaching and of those convictions, I appealed to three testimonies—the Sermon on the Mount, the Lord's Prayer, and the story of the Passion—and I urged that whatever critical opinion might be held respecting the origin and structure of the four Gospels, there could not be any reasonable doubt that those testimonies "afford a true account of our Lord's essential belief and cardinal teaching."

In his original reply, instead of meeting this appeal to three specific testimonies, Prof. Huxley shifted the argument to the question of the general credibility of the Gospels, and appealed to "the main results of biblical criticism, as they are set forth in the works of Strauss, Baur, Reuss, and Volkmar." He referred to these supposed "results" in support of his assertion that we know "absolutely nothing" of the authorship or genuineness of the four Gospels, and he challenged my reference to Renan as a witness to the fact that criticism has established no such results. In answer, I quoted passage after passage from Renan and from Reuss showing that the results at which they had arrived were directly contradictory of Prof. Huxley's assertions. How does he meet this evidence? He simply says, in a foot-note, "For the present I must content myself with warning my readers against any reliance upon Dr. Wace's statements as to the results arrived at by modern criticism. They are as gravely as surprisingly erroneous." I might ask by what right Prof. Huxley thus presumes to pronounce, as it were *ex cathedra*, without adducing any evidence, that the statements of another writer are "surprisingly erroneous"? But I in my turn content myself with pointing out that, if my quotations from Renan and Reuss had been incorrect, he could not only have said so, but could have produced the correct quotations. But he does not deny, as of course he can not, that Reuss, for example, really states, as the mature result of his investigations, what I quoted from him respecting St. Luke's Gospel, namely, that it was written by St. Luke and has reached us in its primitive form, and, further, that St. Luke used a book written by St. Mark, the disciple of St. Peter, and that this book in all probability comprised in its primitive form what we read in the present day from Mark i, 21, to xiii, 37. These are the results of modern criticism as stated by a biblical critic in whom Prof. Huxley expressed special confidence. It was not therefore my statements of the results of biblical criticism with which Prof. Huxley was confronted, but Reuss's statements; and, unless he can show that my quotation was a false one, he ought to have had the candor to acknowledge that Reuss, at least, is on these vital points dead against him. Instead of any such frank admission, he endeavors to explain away the force of his reference to Reuss. It may, he says, be well for him

to observe that approbation of the manner in which a great biblical scholar—for instance, Reuss—does his work does not commit me to the adoption of all, or indeed of any, of his views; and, further, that the disagreements of a series of investigators do not in any way interfere with the fact that each of them has made important contributions to the body of truth ultimately established.

But I beg to observe that Prof. Huxley did not appeal to Reuss's methods, but to Reuss's results. He said that no retraction by M. Renan would sensibly affect "the main results of biblical criticism as they are set forth in the works of Strauss, Baur, Reuss, and Volkmar." I have given him the results as set forth by Reuss in Reuss's own words, and all he has to offer in reply is an *ipse dixit* in a foot-note and an evasion in the text of his article.

But, as I said, this general discussion respecting the authenticity and credibility of the Gospels was an evasion of my argument, which rested upon the specific testimony of the Sermon on the Mount, the Lord's Prayer, and the narrative of the Passion; and, accordingly, in his present rejoinder Prof. Huxley, with much protestation that he made no evasion, addressed himself to these three points. And what is his answer? I feel obliged to characterize it as another evasion,

and in one particular an evasion of a flagrant kind. The main point of his argument is that from various circumstances, which I will presently notice more particularly, there is much reason to doubt whether the Sermon on the Mount was ever actually delivered in the form in which it is recorded in St. Matthew. He notices, for instance, the combined similarity and difference between St. Matthew's Sermon on the Mount and St. Luke's so-called "Sermon on the Plain," and then he adds:

I thought that all fairly attentive and intelligent students of the Gospels, to say nothing of theologians of reputation, knew these things. But how can any one who does know them have the condescence to ask whether there is "any reasonable doubt" that the Sermon on the Mount was preached by Jesus of Nazareth?

It is a pity that Prof. Huxley seems as incapable of accuracy in his quotations of an opponent's words as in his references to the authorities to whom he appeals. I did not ask "whether there is any reasonable doubt that the Sermon on the Mount was preached by Jesus of Nazareth," and I expressly observed, in the article to which Prof. Huxley is replying, that "Prof. Reuss thinks, as many good critics have thought, that the Sermon on the Mount combines various distinct utterances of our Lord." What I did ask, in words which Prof. Huxley quotes, and therefore had before his eyes, was "whether there is any reasonable doubt that the Lord's Prayer and the Sermon on the Mount afford a true account of our Lord's essential belief and cardinal teaching." That is an absolutely distinct question from the one which Prof. Huxley dissects, and a confusion of the two is peculiarly inexcusable in a person who holds that purely human view of the Gospel narratives which he represents. If a long report of a speech appears in the "Times" and a shortened report appears in the "Standard," every one knows that we are none the less made acquainted—perhaps made still better acquainted—with the essential purport and cardinal meaning of the speaker. On the supposition, similarly, that St. Matthew and St. Luke are simply giving two distinct accounts of the same address, with such omissions and variations of order as suited the purposes of their respective narratives, we are in at least as good a position for knowing what was the main burden of the address as if we only had one account, and perhaps in a better position, as we see what were the points which both reporters deemed essential. As Prof. Huxley himself observes, we have reports of speeches in ancient historians which are certainly not in the very words of the speakers; yet no one doubts that we know the main purport of the speeches of Pericles which Thucydides records.

This attempt, therefore, to answer my appeal to the substance of the teaching of the Sermon on the Mount is a palpable evasion, and it is aggravated by the manner in which Prof. Huxley quotes a high German authority in support of his contention. I am much obliged to him for appealing to Holtzmann; for, though Holtzmann's own conclusions respecting the books of the New Testament seem to me often extravagantly skeptical and far-fetched, and though I can not, therefore, quite agree with Prof. Huxley that his "Lehrbuch" gives "a remarkably full and fair account of the present results of criticism," yet I agree that it gives on the whole a full and fair account of the course of criticism and of the opinions of its chief representatives. Instead, therefore, of imitating Prof. Huxley, and pronouncing an *ipse dixit* as to the state of criticism or the opinions of critics, I am very glad to be able to refer to a book of which the

authority is recognized by him, and which will save both my readers and myself from embarking on the wide and waste ocean of the German criticism of the last fifty years. "Holtzmann, then," says Prof. Huxley in a note on page 104, "has no doubt that the Sermon on the Mount is a compilation, or, as he calls it in his recently published 'Lehrbuch' (p. 372), 'an artificial mosaic work.'" Now, let the reader attend to what Holtzmann really says in the passage referred to. His words are: "In the so-called Sermon on the Mount (Matt. v-vii) we find constructed, on the basis of a real discourse of fundamental significance, a skillfully articulated mosaic work."* The phrase was not so long a one that Prof. Huxley need have omitted the important words by which those he quotes are qualified. Holtzmann recognizes, as will be seen, that a real discourse of fundamental significance underlies the Sermon on the Mount. That is enough for my purpose; for no reasonable person will suppose that the fundamental significance of the real discourse has been entirely obliterated, especially as the main purport of the sermon in St. Luke is of the same character. But Prof. Huxley must know perfectly well, as every one else does, that he would be maintaining a paradox, in which every critic of repute, to say nothing of every man of common sense, would be against him, if he were to maintain that the Sermon on the Mount does not give a substantially correct idea of our Lord's teaching. But to admit this is to admit my point, so he rides off on a side issue as to the question of the precise form in which the sermon was delivered.

I must, however, take some notice of Prof. Huxley's argument on this irrelevant issue, as it affords a striking illustration of that superior method of ratiocination in these matters on which he prides himself. I need not trouble the reader much on the questions he raises as to the relations of the first three Gospels. Any one who cares to see a full and thorough discussion of that difficult question, conducted with a complete knowledge of foreign criticism on the subject, and at the same time marked by the greatest lucidity and interest, may be referred to the admirable "Introduction to the New Testament," by Dr. Salmon, who, like Prof. Huxley, is a Fellow of the Royal Society, and who became eminent as one of the first mathematicians of Europe before he became similarly eminent as a theologian. I am content here to let Prof. Huxley's assumption pass, as I am only concerned to illustrate the fallacious character of the reasoning he founds upon them. He tells us, then, that—

there is now no doubt that the three synoptic Gospels, so far from being the work of three independent writers, are closely interdependent, and that in one of two ways. Either all three contain, as their foundation, versions, to a large extent, verbally identical, of one and the same tradition; or two of them are thus closely dependent on the third; and the opinion of the majority of the best critics has, of late years, more and more converged toward the conviction that our canonical second Gospel (the so-called "Mark's" Gospel) is that which most closely represents the primitive groundwork of the three. That I take to be one of the most valid results of New Testament criticism, of immeasurably greater importance than the discussion about dates and authorship. But if, as I believe to be the case beyond any rational doubt or dispute, the second Gospel is the nearest extant representative of the oldest tradition, whether written or oral, how comes it that it contains neither the "Sermon on the Mount" nor the "Lord's Prayer," those typical embodiments, according to Dr. Wace, of the "essential belief and cardinal teaching" of Jesus?

I have quoted every word of this passage because I am anxious for the reader to estimate the value of Prof. Huxley's own statement of his case. It is, as he says, the opinion of many critics of authority that a certain fixed tradition, written or oral, was used by the writers of the first three Gospels. In the first place, why this should prevent those three Gospels from being the work of "three independent

* "In der sog. Bergpredigt, Mt. 5-7, gibt sich eine, auf Grund einer wirklichen Rede von fundamentaler Bedeutung sich erhebbende, kunstreich gegliederte Mosaikarbeit."

writers" I am at a loss to conceive. If Mr. Froude, the late Prof. Brewer, and the late Mr. Green each use the Rolls Calendars of the reign of Henry VIII, I do not see that this abolishes their individuality. Any historian who describes the Peloponnesian War uses the memoirs of that war written by Thucydides; but Bishop Thirlwall and Mr. Grote were, I presume, independent writers. But to pass to a more important point, that which is assumed is that the alleged tradition, written or oral, was the groundwork of our first three Gospels, and it is, therefore, older than they are. Let it be granted, for the sake of argument. But how does this prove that the tradition in question is "the oldest," so that anything which was not in it is thereby discredited? It was, let us allow, an old tradition used by the writers of the first three Gospels. But how does this fact raise the slightest presumption against the probability that there were other traditions equally old which they might use with equal justification so far as their scope required? Prof. Huxley alleges, and I do not care to dispute the allegation, that the first three Gospels embody a certain record older than themselves. But by what right does he ask me to accept this as evidence, or as affording even the slightest presumption, that there was no other? Between his allegation in one sentence that the second Gospel "most closely represents the primitive groundwork of the three," and his allegation, in the next sentence but one, that "the second Gospel is the nearest extant representative of the oldest tradition," there is an absolute and palpable *non sequitur*. It is a mere juggle of phrases, and upon this juggle the whole of his subsequent argument on this point depends. St. Mark's Gospel may very well represent the oldest tradition *relative to the common matter of the three*, without, therefore, necessarily representing "the oldest tradition" in such a sense as to be a touchstone for all other reports of our Lord's life. Prof. Huxley must know very well that from the time of Schleiermacher many critics have believed in the existence of another document containing a collection of our Lord's discourses. Holtzmann concludes ("Lehrbuch," page 376) that "under all the circumstances the hypothesis of two sources offers the most probable solution of the synoptical problem"; and it is surely incredible that no old traditions of our Lord's teaching should have existed beyond those which are common to the three Gospels. St. Luke, in fact, in that preface which Prof. Huxley has no hesitation in using for his own purposes, says that "many had taken in hand to set forth in order a declaration of those things which are most surely believed among us"; but Prof. Huxley asks us to assume that none of these records were old, and none trustworthy, but that particular one which furnishes a sort of skeleton to the first three Gospels. There is no evidence whatever, beyond Prof. Huxley's private judgment, for such an assumption. Nay, he himself tells us that, according to Holtzmann, it is at present a "burning question" among critics "whether the relatively primitive narration and the root of the other synoptic texts is contained in Matthew or in Mark."* Yet while his own authority tells him that this is a burning question, he treats it as settled in favor of St. Mark, "beyond any rational doubt or dispute," and employs this assumption as sufficiently solid ground on which to rest his doubts of the genuineness of the Sermon on the Mount and the Lord's Prayer!

* Page 51.

But let us pass to another point in Prof. Huxley's mode of argument. Let us grant, again, for the sake of argument, his *non sequitur* that the second Gospel is the nearest extant representative of the oldest tradition. "How comes it," he asks, "that it contains neither the Sermon on the Mount nor the Lord's Prayer?" Well, that is a very interesting inquiry, which has, in point of fact, often been considered by Christian divines; and various answers are conceivable, equally reasonable and sufficient. If it was St. Mark's object to record our Lord's acts rather than his teaching, what right has Prof. Huxley, from his purely human point of view, to find fault with him? If, from a Christian point of view, St. Mark was inspired by a divine guidance to present the most vivid, brief, and effective sketch possible of our Lord's action as a Savior, and for that purpose to leave to another writer the description of our Lord as a teacher, the phenomenon is not less satisfactorily explained. St. Mark, according to that tradition of the Church which Prof. Huxley believes to be quite worthless, but which his authority Holtzmann does not, was in great measure the mouth-piece of St. Peter. Now, St. Peter is recorded in the Acts of the Apostles, in his address to Cornelius, as summing up our Lord's life in these words: "How God anointed Jesus of Nazareth with the Holy Ghost and with power, who went about doing good, and healing all who were oppressed of the devil; for God was with him"; and this is very much the point of view represented in St. Mark's Gospel. When, in fact, Prof. Huxley asks, in answer to Holtzmann, who is again unfavorable to his views, "What conceivable motive could Mark have for omitting it?"* the answers that arise are innumerable. Perhaps, as has been suggested, St. Mark was more concerned with acts than words; perhaps he wanted to be brief; perhaps he was writing for persons who wanted one kind of record and not another; and, above all, perhaps it was not so much a question of "omission" as of selection. It is really astonishing that this latter consideration never seems to cross the mind of Prof. Huxley and writers like him. The Gospels are among the briefest biographies in the world. I have sometimes thought that there is evidence of something superhuman about them in the mere fact that, while human biographers labor through volumes in order to give us some idea of their subject, every one of the Gospels, occupying no more than a chapter or two in length of an ordinary biography, nevertheless gives us an image of our Lord sufficiently vivid to have made him the living companion of all subsequent generations. But if "the gospel of Jesus Christ" was to be told within the compass of the sixteen chapters of St. Mark, some selection had to be made out of the mass of our Lord's words and deeds as recorded by the tradition of those "who from the beginning were eye-witnesses and ministers of the word." The very greatness and effectiveness of these four Gospels consist in this wonderful power of selection, like that by which a great artist depicts a character and a figure in half a dozen touches; and Prof. Huxley may, perhaps, to put the matter on its lowest level, find out a conceivable motive for St. Mark's omissions when he can produce such an effective narrative as St. Mark's. As St. John says at the end of his Gospel, "There are also many other things which Jesus did, the which, if they should be written every one, I suppose that

* Page 38.

even the world itself could not contain the books that should be written." So St. John, like St. Mark, had to make his selection, and selection involves omission.

But, after all, I venture to ask whether anything can be more preposterous than this supposition that because a certain tradition is the oldest authority, therefore every other authority is discredited? Boswell writes a life of Johnson; therefore every record of Johnson's acts or words which is not in Boswell is to be suspected. Carlyle writes a life of Sterling first, and Archdeacon Hare writes one afterward; therefore nothing in the archdeacon's life is to be trusted which was not also in Carlyle's. What seems to me so astonishing about Prof. Huxley's articles is not the wildness of their conclusions, but the rottenness of their ratiocination. To take another instance:

Luke either knew the collection of loosely connected and aphoristic utterances which appear under the name of the "Sermon on the Mount" in "Matthew," or he did not. If he did not, he must have been ignorant of the existence of such a document as our canonical "Matthew," a fact which does not make for the genuineness or the authority of that book. If he did, he has shown that he does not care for its authority on a matter of fact of no small importance; and that does not permit us to conceive that he believed the first Gospel to be the work of an authority to whom he ought to defer, let alone that of an apostolic eye-witness.

I pass by the description of the Sermon on the Mount as a "collection of loosely connected utterances," though it is a kind of begging of a very important question. But supposing St. Luke to have been ignorant of the existence of St. Matthew's Gospel, how does this reflect on the genuineness of that book unless we know, as no one does, that St. Matthew's Gospel was written before St. Luke's, and sufficiently long before it to have become known to him? Or, if he did know it, where is the disrespect to its authority in his having given for his own purposes an abridgment of that which St. Matthew gave more fully? Prof. Huxley might almost seem dominated by the mechanical theory of inspiration which he denounces in his antagonists. He writes as if there were something absolutely sacred, neither to be altered nor added to, in the mere words of some old authority of which he conceives himself to be in possession. Dr. Abbott, with admirable labor, has had printed for him, in clear type, the words or bits of words which are common to the first three Gospels, and he seems immediately to adopt the anathema of the book of Revelation, and to proclaim to every man, evangelists and apostles included, "if any man shall add unto these things, . . . and if any man shall take away from the words" of this "common tradition" of Dr. Abbott, he shall be forthwith scientifically excommunicated. I venture to submit, as a mere matter of common sense, that if three persons used one document, it is the height of rashness to conclude that it contained nothing but what they all three quote; that it is not only possible but probable that, while certain parts were used by all, each may have used some parts as suitable to his own purpose which the others did not find suitable to theirs; and, lastly, that the fact of there having been one such document in existence is so far from being evidence that there were no others, that it even creates some presumption that there were. In short, I must beg leave to represent, not so much that Prof. Huxley's conclusions are very wrong, but that there is absolutely no validity in the reasoning by which he endeavors to support them. It is not, in fact, reasoning at all, but mere presumption and guess-work, inconsistent, moreover, with all experience and common sense.

Of course, if Prof. Huxley's quibbles against the Sermon on the Mount go to pieces, so do his cavils at the authenticity of the Lord's

Prayer; and, indeed, on these two points I venture to think that the case for which I was contending is carried by the mere fact that it seems necessary to Prof. Huxley's position to dispute them. If he can not maintain his ground without pushing his agnosticism to such a length as to deny the substantial genuineness of the Sermon on the Mount and the Lord's Prayer, I think he will be found to have allowed enough to satisfy reasonable men that his case must be a bad one. I shall not, therefore, waste more time on these points, as I must say something on his strange treatment of the third point in the evangelical records to which I referred, the story of the Passion. It is really difficult to take seriously what he says on this subject. He says:

I am not quite sure what Dr. Wace means by this—I am not aware that any one (with the exception of certain ancient heretics) has propounded doubts as to the reality of the crucifixion; and certainly I have no inclination to argue about the precise accuracy of every detail of that pathetic story of suffering and wrong. But if Dr. Wace means, as I suppose he does, that that which, according to the orthodox view, happened after the crucifixion, and which is, in a dogmatic sense, the most important part of the story, is founded on solid historical proofs, I must beg leave to express a diametrically opposite conviction.

Prof. Huxley is not quite sure what I mean by the story of the Passion, but supposes I mean the story of the resurrection! It is barely credible that he can have supposed anything of the kind, but by this gratuitous supposition he has again evaded the issue I proposed to him, and has shifted the argument to another topic, which, however important in itself, is entirely irrelevant to the particular point in question. If he really supposed that when I said the Passion I meant the resurrection, it is only another proof of his incapacity for strict argument, at least on these subjects. I not only used the expression "the story of the Passion," but I explicitly stated in my reply to him for what purpose I appealed to it. I said that "that story involves the most solemn attestation, again and again, of truths of which an agnostic coolly says he knows nothing"; and I mentioned particularly our Lord's final utterance, "Father, into thy hands I commend my spirit," as conveying our Lord's attestation in his death agony to his relation to God as his Father. That exclamation is recorded by St. Luke; but let me remind the reader of what is recorded by St. Mark, upon whom Prof. Huxley mainly relies. There we have the account of the agony in Gethsemane and of our Lord's prayer to his Father; we have the solemn challenge of the high priest, "Art thou the Christ, the son of the Blessed?" and our Lord's reply, "I am; and ye shall see the Son of man sitting on the right hand of power, and coming in the clouds of heaven," with his immediate condemnation, on the ground that in this statement he had spoken blasphemy. On the cross, moreover, St. Mark records his affecting appeal to his Father, "My God, my God, why hast thou forsaken me?" All this solemn evidence Prof. Huxley puts aside with the mere passing observation that he has "no inclination to argue about the precise accuracy of every detail of that pathetic story of suffering and wrong." But these prayers and declarations of our Lord are not mere details; they are of the very essence of the story of the Passion; and whether Prof. Huxley is inclined to argue about them or not, he will find that all serious people will be influenced by them to the end of time, unless they be shown to be unhistorical.

At all events, by refusing to consider their import, Prof. Huxley has again, in the most flagrant manner, evaded my challenge. I not only mentioned specifically "the story of the Passion," but I explained

what I meant by it; and Prof. Huxley asks us to believe that he does not understand what I referred to; he refuses to face that story; and he raises an irrelevant issue about the resurrection. It is irrelevant, because the point specifically at issue between us is not the truth of the Christian creed, but the meaning of agnosticism, and the responsibilities which agnosticism involves. I say that whether agnosticism be justifiable or not, it involves a denial of the beliefs in which Jesus lived and died. It would equally involve a denial of them had he never risen; and if Prof. Huxley really thinks, therefore, that a denial of the resurrection affects the evidence afforded by the Passion, he must be incapable of distinguishing between two successive and entirely distinct occurrences.

But the manner in which Prof. Huxley has treated this irrelevant issue deserves perhaps a few words, for it is another characteristic specimen of his mode of argument. I note, by the way, that, after referring to "the facts of the case as stated by the oldest extant narrative of them"—he means the story in St. Mark, though this is not a part of that common tradition of the three Gospels on which he relies; for, as he observes, the accounts in St. Matthew and St. Luke present marked variations from it—he adds:

I do not see why any one should have a word to say against the inherent probability of that narrative; and, for my part, I am quite ready to accept it as an historical fact, that so much and no more is positively known of the end of Jesus of Nazareth.

We have, then, the important admission that Prof. Huxley has not a word to say against the historic credibility of the narrative in the fifteenth chapter of St. Mark, and accordingly he proceeds to quote its statements for the purpose of his argument. That argument, in brief, is that our Lord might very well have survived his crucifixion, have been removed still living to the tomb, have been taken out of it on the Friday or Saturday night by Joseph of Arimathea, and have recovered and found his way to Galilee. So much Prof. Huxley is prepared to believe, and he asks "on what grounds can a reasonable man be asked to believe any more?" But a prior question is on what grounds can a reasonable man be asked to believe as much as this? In the first place, if St. Mark's narrative is to be the basis of discussion, why does Prof. Huxley leave out of account the scourging, with the indication of weakness in our Lord's inability to bear his cross, and treat him as exposed to crucifixion in the condition simply of "temperate, strong men, such as the ordinary Galilean peasants were"? In the next place, I am informed by good medical authority that he is quite mistaken in saying that "no serious physical symptoms need at once arise from the wounds made by the nails in the hands and feet," and that, on the contrary, very grave symptoms would ordinarily arise in the course of no long time from such severe wounds, left to fester, with the nails in them, for six hours. In the third place, Prof. Huxley takes no account of the piercing of our Lord's side, and of the appearance of blood and water from the wound, which is solemnly attested by one witness. It is true that incident is not recorded by St. Mark; but Prof. Huxley must disprove the witness before he can leave it out of account. But, lastly, if Prof. Huxley's account of the matter be true, the first preaching of the church must have been founded on a deliberate fraud, of which some at least of our Lord's most intimate friends were guilty, or to which they were accessory; and I thought that supposition was practically out of

account among reasonable men. Prof. Huxley argues as if he had only to deal with the further evidence of St. Paul. That, indeed, is evidence of a far more momentous nature than he recognizes; but it is by no means the most important. It is beyond question that the Christian society, from the earliest moment of its existence, believed in our Lord's resurrection. Baur frankly says that there is no doubt about the church having been founded on this belief, though he can not explain how the belief arose. If the resurrection be a fact, the belief is explained; but it is certainly not explained by the supposition of a fraud on the part of Joseph of Arimathea. As to Prof. Huxley's assertion that the accounts in the three Gospels are "hopelessly discrepant," it is easily made and as easily denied; but it is out of all reason that Prof. Huxley's bare assertion on such a point should outweigh the opinions of some of the most learned judges of evidence, who have thought no such thing. It would be absurd to attempt to discuss that momentous story as a side issue in a review. It is enough to have pointed out that Prof. Huxley discusses it without even taking into account the statements of the very narrative on which he relies. The manner in which he sets aside St. Paul is equally reckless:

According to his own showing, Paul, in the vigor of his manhood, with every means of becoming acquainted, at first hand, with evidence of eye-witnesses, not merely refused to credit them, but "persecuted the Church of God and made havoc of it." . . . Yet this strange man, because he has a vision one day, at once, and with equally headlong zeal, flies to the opposite pole of opinion.

"A vision!" The whole question is, what vision? How can Prof. Huxley be sure that no vision could be of such a nature as to justify a man in acting on it? If, as we are told, our Lord personally appeared to St. Paul, spoke to him, and gave him specific commands, was he to disbelieve his own eyes and ears, as well as his own conscience, and go up to Jerusalem to cross-examine Peter and John and James? If the vision was a real one he was at once under orders, and had to obey our Lord's injunctions. It is, to say the least, rash, if not presumptuous, for Prof. Huxley to declare that such a vision as St. Paul had would not have convinced him; and, at all events, the question is not disposed of by calling the manifestation "a vision." Two things are certain about St. Paul. One is that he was in the confidence of the Pharisees, and was their trusted agent in persecuting the Christians; and the other is that he was afterward in the confidence of the apostles, and knew all their side of the case. He holds, therefore, the unique position of having had equal access to all that would be alleged on both sides; and the result is that, being fully acquainted with all that the Pharisees could urge against the resurrection, he nevertheless gave up his whole life to attesting its truth, and threw in his lot, at the cost of martyrdom, with those whom he had formerly persecuted. Prof. Huxley reminds us that he did all this in the full vigor of manhood, and in spite of strong and even violent prejudices. This is not a witness to be put aside in Prof. Huxley's off-hand manner.

But the strangest part of Prof. Huxley's article remains to be noticed; and, so far as the main point at issue between us is concerned, I need hardly have noticed anything else. He proceeds to a long and intricate discussion, quite needless, as I think, for his main object, respecting the relations between the Nazarenes, Ebionites, Jewish and Gentile Christians, first in the time of Justin Martyr and

then of St. Paul. Into this discussion, in the course of which he makes assumptions which, as Holtzmann will tell him, are as much questioned by the German criticism on which he relies as by English theologians, it is unnecessary for me to follow him. The object of it is to establish a conclusion, which is all with which I am concerned. That conclusion is that "if the primitive Nazarenes of whom the Acts speak were orthodox Jews, what sort of probability can there be that Jesus was anything else?"* But what more is necessary for the purpose of my argument? To say, indeed, that this *a priori* probability places us "in a position to form a safe judgment of the limits within which the teaching of Jesus of Nazareth must have been confined," is to beg a great question, for it assumes that our Lord could not have transcended those limits unless his disciples transcended them simultaneously with him. But if our Lord's beliefs were those of an orthodox Jew, we certainly know enough of them to be quite sure that they involved a denial of Prof. Huxley's agnosticism. An orthodox Jew certainly believed in God, and in his responsibility to God, and in a divine revelation and a divine law. It is, says Prof. Huxley, "extremely probable" that he appealed "to those noble conceptions of religion which constituted the pith and kernel of the teaching of the great prophets of his nation seven hundred years earlier." But, if so, his first principles involved the assertion of religious realities which an agnostic refuses to acknowledge. Prof. Huxley has, in fact, dragged his readers through this thorny question of Jewish and Gentile Christianity in order to establish, at the end of it, and, as it seems, quite unconsciously, an essential part of the very allegation which I originally made. I said that a person who "knows nothing" of God asserts the belief of Jesus of Nazareth to have been unfounded, repudiates his example, and denies his authority. Prof. Huxley, in order to answer this contention, offers to prove, with great elaboration, that Jesus was an orthodox Jew, and consequently that his belief did involve what an agnostic rejects. How much beyond these elementary truths Jesus taught is a further and a distinct question. What I was concerned to maintain is that a man can not be an agnostic with respect to even the elementary truths of religion without rejecting the example and authority of Jesus Christ; and Prof. Huxley, though he still endeavors to avoid facing the fact, has established it by a roundabout method of his own.

I suppose I must also reply to Prof. Huxley's further challenge respecting my belief in the story of the Gadarene swine, though the difficulty of which he makes so much seems to me too trivial to deserve serious notice. He says "there are two stories, one in 'Mark' and 'Luke,' and the other in 'Matthew.' In the former there is one possessed man, in the latter there are two," and he asks me which I believe? My answer is that I believe both, and that the supposition of there being any inconsistency between them can only arise on that mechanical view of inspiration from which Prof. Huxley seems unable to shake himself free. Certainly "the most unabashed of reconcilers can not well say that one man is the same as two, or two as one"; but no one need be abashed to say that the greater number includes the less, and that if two men met our Lord, one certainly did. If I go into the operating theatre of King's College Hospital, and see an

eminent surgeon perform a new or rare operation on one or two patients, and if I tell a friend afterward that I saw the surgeon perform such and such an operation on a patient, will he feel in any perplexity if he meets another spectator half an hour afterward who says he saw the operation performed on two patients? All that I should have been thinking of was the nature of the operation, which is as well described by reference to one patient as to half a dozen; and similarly St. Mark and St. Luke may have thought that the only important point was the nature of the miracle itself, and not the number of possessed men who were the subjects of it. It is quite unnecessary, therefore, for me to consider all the elaborate dilemmas in which Prof. Huxley would entangle me respecting the relative authority of the first three Gospels. As two includes one, and as both witnesses are in my judgment equally to be trusted, I adopt the supposition which includes the statements of both. It is a pure assumption that inspiration requires verbal accuracy in the reporting of every detail, and an assumption quite inconsistent with our usual tests of truth. Just as no miracle has saved the texts of the Scriptures from corruption in secondary points, so no miracle has been wrought to exclude the ordinary variations of truthful reporters in the Gospel narratives. But a miracle, in my belief, has been wrought in inspiring four men to give, within the compass of their brief narratives, such a picture of the life and work and teaching, of the death and resurrection, of the Son of man as to illuminate all human existence for the future, and to enable men "to believe that Jesus is the Christ, and believing to have life through his name."

It is with different feelings from those which Prof. Huxley provokes that I turn for a while to Mrs. Humphrey Ward's article on "The New Reformation." Since he adopts that article as a sufficient confutation of mine, I feel obliged to notice it, though I am sorry to appear in any position of antagonism to its author. Apart from other considerations, I am under much obligation to Mrs. Ward for the valuable series of articles which she contributed to the "Dictionary of Christian Biography" under my editorship, upon the obscure but interesting history of the Goths in Spain. I trust that, in her account of the effect upon Robert Elsmere and Merriman of absorption in that barbarian scene, she is not describing her own experience and the source of her own aberrations. But I feel especially bound to treat her argument with consideration, and to waive any opposition which can be avoided. I am sorry that she, too, questions the possibility in this country of "a scientific, that is to say, an unprejudiced, an unbiased study of theology, under present conditions, and I should have hoped that she would have had too much confidence in her colleagues in the important work to which I refer than to cast this slur upon them. Their labors have, in fact, been received with sufficient appreciation by German scholars of all schools to render their vindication unnecessary; and if Prof. Huxley can extend his study of German theological literature much beyond Zeller's "Vortrage" of "a quarter of a century ago," or Ritschl's writings of "nearly forty years ago," he will not find himself countenanced by church historians in Germany in his contempt for the recent contributions of English scholars to early church history. However, it is the more easy for me to waive all differences of this nature with Mrs. Ward, because it is unnecessary for me to look beyond her article for its own refutation.

Her main contention, or that at least for which Prof. Huxley appeals to her, seems to be that it is a mistake to suppose that the rationalistic movement of Germany has been defeated in the sphere of New Testament criticism, and she selects more particularly for her protest a recent statement in the "Quarterly Review" that this criticism, and particularly the movement led by Baur, is "an attack which has failed." The Quarterly Reviewer may be left to take care of himself; but I would only ask what is the evidence which Mrs. Ward adduces to the contrary? It may be summed up in two words—a prophecy and a romance. She does not adduce any evidence that the Tübingen school, which is the one we are chiefly concerned with, did not fail to establish its specific contentions; on the contrary, she says that "history protested," and she goes on to prophesy the success of other speculations which arose from that protest, concluding with an imaginary sketch, like that with which "Robert Elsmere" ends, of a "new Reformation preparing, struggling into utterance and being, all around us. . . . It is close upon us—it is prepared by all the forces of history and mind—its rise sooner or later is inevitable." This is prophesy, but it is not argument; and a little attention to Mrs. Ward's own statements will exhibit a very different picture. The Christian representative in her dialogue exclaims:

What is the whole history of German criticism but a series of brilliant failures, from Strauss downward? One theorist follows another—now Mark is uppermost as the Ur-Evangelist, now Matthew—now the synoptics are sacrificed to St. John, now St. John to the synoptics. Baur relegates one after another of the Epistles to the second century because his theory can not do with them in the first. Harnack tells you that Baur's theory is all wrong, and that Thessalonians and Philippians must go back again. Volkmar sweeps together Gospels and Epistles in a heap toward the middle of the second century as the earliest date for almost all of them; add Dr. Abbott, who, as we are told, has absorbed all the learning of the Germans, puts Mark before 70 A. D., Matthew just about 70 A. D., and Luke about 80 A. D.; Strauss's mythical theory is dead and buried by common consent; Baur's tendency theory is much the same; Renan will have none of the Tübingen school; Volkmar is already antiquated; and Pfleiderer's fancies are now in the order of the day.

A better statement could hardly be wanted of what is meant by an attack having failed, and now let the reader observe how Merriman in the dialogue meets it. Does he deny any of those allegations? Not one. "Very well," he says, "let us leave the matter there for the present. Suppose we go to the Old Testament"; and then he proceeds to dwell on the concessions made to the newest critical school of Germany by a few distinguished English divines at the last Church Congress. I must, indeed, dispute her representation of that rather one-sided debate as amounting to "a collapse of English orthodoxy," or as justifying her statement that "the Church of England practically gives its verdict" in favor, for instance, of the school which regards the Pentateuch or the Hexateuch as "the peculiar product of that Jewish religious movement which, beginning with Josiah, . . . yields its final fruits long after the exile." Not only has the Church of England given no such verdict, but German criticism has as yet given no such verdict. For example, in the introduction to the Old Testament by one of the first Hebrew scholars of Germany, Prof. Hermann Strack, contained in the valuable "Hand-book of the Theological Sciences," edited, with the assistance of several distinguished scholars, by Prof. Zöckler, I find, at page 215 of the third edition, published this year, the following brief summary of what, in Dr. Strack's opinion, is the result of the controversy so far:

The future results of further labors in the field of Pentateuch criticism can not, of course, be predicted in particulars. But, in spite of the great assent which the view of Graff and Wellhausen at present enjoys, we are nevertheless convinced that it will not permanently lead to any essential alteration in the conception which has hitherto prevailed of the history of Israel, and in particu-

lar of the work of Moses. On the other hand, one result will certainly remain, that the Pentateuch was not composed by Moses himself, but was compiled by later editors from various original sources. . . . But the very variety of these sources may be applied in favor of the credibility of the Pentateuch.

In other words, it may be said that Dr. Strack regards it as established that "The Law of Moses" is a title of the same character as "The Psalms of David," the whole collection being denominated from its principal author. But he is convinced that the general conclusions of the prevalent school of Old Testament criticism, which involve an entire subversion of our present conceptions of Old Testament history, will not be maintained. In the face of this opinion, it does not seem presumptuous to express an apprehension that the younger school of Hebrew scholars in England, of whose concessions Mrs. Ward makes so much, have gone too far and too fast; and, at all events, it is clear from what Dr. Strack says—and I might quote also Delitzsch and Dillmann—that it is much too soon to assume that the school of whose conquests Mrs. Ward boasts is supreme. But, even supposing it were, what has this to do with the admitted and undoubted failures on the other side, in the field of New Testament criticism? If it be the fact, as Mrs. Ward does not deny, that not only Strauss's but Baur's theories and conclusions are now rejected; if it has been proved that Baur was entirely wrong in supposing the greater part of the New Testament books were late productions, written with a controversial purpose, what is the use of appealing to the alleged success of the German critics in another field? If Baur is confuted, he is confuted, and there is an end of his theories; though he may have been useful, as rash theorizers have often been, in stimulating investigation. In the same valuable hand-book of Dr. Zöckler's, already quoted, I find, under the "History of the Science of Introduction to the New Testament," the heading (page 15, vol. i, part 2), "Result of the controversy and end of the Tübingen school."

The Tübingen school (the writer concludes, p. 20) could not but fall as soon as its assumptions were recognized and given up. As Hilgenfeld confesses, "It went to an unjustifiable length, and inflicted too deep wounds on the Christian faith. . . . No enduring results in matters of substance have been produced by it."

Such is the judgment of an authoritative German hand-book on the writer to whom, in Merriman's opinion, "we owe all that we really *know* at the present moment about the New Testament," as though the Christian thought and life of eighteen hundred years had produced no knowledge on that subject!

In fact, Mrs. Ward's comparison seems to me to point in exactly the opposite direction:

I say to myself (says her spokesman, p. 466) it has taken some thirty years for German critical science to conquer English opinion in the matter of the Old Testament. . . . How much longer will it take before we feel the victory of the same science . . . with regard to the history of Christian origins?

Remembering that the main movement of New Testament criticism in Germany dates not thirty, but more than fifty years back, and that thirty years ago Baur's school enjoyed the same applause in Germany as that of Wellhausen does now, does it not seem more in conformity with experience and with probability to anticipate that, as the Germans themselves, with longer experience, find they have been too hasty in following Baur, so with an equally long experience they may find they have been similarly too hasty in accepting Wellhausen? The fever of revolutionary criticism on the New Testament was at its height after thirty years, and the science has subsided into comparative health after twenty more. The fever of the revolutionary

criticism of the Old Testament is now at its height, but the parallel suggests a similar return to a more sober and common-sense state of mind. The most famous name, in short, of German New Testament criticism is now associated with exploded theories; and we are asked to shut our eyes to this undoubted fact because Mrs. Ward prophesies a different fate for the name now most famous in Old Testament criticism. I prefer the evidence of established fact to that of romantic prophecy.

But these observations suggest another consideration, which has a very important bearing on that general disparagement of English theology and theologians which Prof. Huxley expresses so offensively, and which Mrs. Ward encourages. She and Prof. Huxley talk as if German theology were all rationalistic and English theology alone conservative. Prof. Huxley invites his readers to study in Mrs. Ward's article

the results of critical investigation as it is carried out among those theologians who are men of science and not mere counsel for creeds;

and he appeals to

the works of scholars and theologians of the highest repute in the only two countries, Holland and Germany, in which, at the present time, professors of theology are to be found, whose tenure of their posts does not depend upon the results to which their inquiries lead them.

Well, passing over the insult to theologians in all other countries, what is the consequence of this freedom in Germany itself? Is it seen that all learned and distinguished theologians in that country are of the opinions of Prof. Huxley and Mrs. Ward? The quotations I have given will serve to illustrate the fact that the exact contrary is the case. If any one wants vigorous, learned, and satisfactory answers to Prof. Huxley and Mrs. Ward, Germany is the best place to which he can go for them. The professors and theologians of Germany who adhere substantially to the old Christian faith are at least as numerous, as distinguished, as learned, as laborious, as those who adhere to skeptical opinions. What is, by general consent, the most valuable and comprehensive work on Christian theology and church history which the last two generations of German divines have produced? Herzog's "*Real-Encyclopädie für protestantische Theologie und Kirche*," of which the second edition, in eighteen large volumes, was completed about a year ago. But it is edited and written in harmony with the general belief of Protestant Christians. Who have done the chief exegetical work of the last two generations? On the rationalistic side, though not exclusively so, is the "*Kurzgefasstes exegetisches Handbuch*," in which, however, at the present time, Dillmann represents an opposition to the view of Wellhausen respecting the Pentateuch; but on the other side we have Meyer on the New Testament—almost the standard work on the subject—Keil and Delitzsch on the Old Testament—and a great part of the New, Lange's immense "*Bibelwerk*," and the valuable "*Kurzgefasster Kommentar*" on the whole Scripture, including the Apocrypha, now in course of publication under the editorship of Profs. Strack and Zöckler. The Germans have more time for theoretical investigations than English theologians, who generally have a great deal of practical work to do; and German professors, in their numerous universities, in great measure live by them. But it was by German theologians that Baur was refuted; it is by German Hebraists like Strack that Wellhausen and Kuenen are now being best resisted. When Prof. Huxley and Mrs.

Ward would leave an impression that, because German theological chairs are not shackled by articles like our own, therefore the best German thought and criticism is on the rationalistic side, they are conveying an entirely prejudiced representation of the facts. The effect of the German system is to make everything an open question; as though there were no such thing as a settled system of the spiritual universe, and no established facts in Christian history; and thus to enable any man of great ability with a skeptical turn to unsettle a generation and leave the edifice of belief to be built up again. But the edifice is built up again, and Germans take as large a part in rebuilding it as in undermining it. Because Prof. Huxley and Mrs. Ward can quote great German names on one side, let it not be forgotten that just as able German names can be quoted on the other side. Take, for instance, Harnack, to whom Mrs. Ward appeals, and whose "History of Dogmas" Prof. Huxley quotes. Harnack himself, in reviewing the history of his science, pays an honorable tribute to the late eminent divine, Thomasius, whose "History of Dogmas" has just been republished after his death, and who wrote in the devoutest spirit of the Lutheran communion. Of course, Harnack regards his point of view as narrow and unsatisfactory; but he adds that, "equally great are the valuable qualities of this work in particular, in regard of its exemplarily clear exposition, its eminent learning and the author's living comprehension of religious problems." A man who studies the history of Christian theology in Harnack without reference to Thomasius will do no justice to his subject.

But, says Mrs. Ward, there is no real historical apprehension in the orthodox writers, whether of Germany or England, and the whole problem is one of "historical translation." Every statement, every apparent miracle, everything different from daily experience, must be translated into the language of that experience, or else we have not got real history. But this, it will be observed, under an ingenious disguise, is only the old method of assuming that nothing really miraculous can have happened, and that therefore everything which seems supernatural must be explained away into the natural. In other words, it is once more begging the whole question at issue. Mrs. Ward accuses orthodox writers of this fallacy; but it is really her own. Merriman is represented as saying that he learned from his Oxford teachers that

it was imperatively right, to endeavor to disentangle miracle from history, the marvelous from the real, in a document of the fourth, or third, or second century; . . . but the contents of the New Testament, however marvelous and however apparently akin to what surrounds them on either side, were to be treated from an entirely different point of view. In the one case there must be a desire on the part of the historian to discover the historical under the miraculous, . . . in the other case there must be a desire, a strong "affection," on the part of the theologian, toward proving the miraculous to be historical.

Mrs. Ward has entirely mistaken the point of view of Christian science. Certainly if any occurrence anywhere can be explained by natural causes, there is a strong presumption that it ought to be so explained; for, though a natural effect may be due in a given case to supernatural action, it is a fixed rule of philosophizing, according to Newton, that we should not assume unknown causes when known ones suffice. But the whole case of the Christian reasoner is that the records of the New Testament defy any attempt to explain them by natural causes. The German critics Hase, Strauss, Baur, Hausrath, Keim, all have made the attempt, and each, in the opinion of the others, and finally of Pfleiderer, has offered an insufficient solution of the

problem. The case of the Christian is not that the evidence ought not to be explained naturally and translated into every-day experience, but that it can not be. But it is Mrs. Ward who assumes beforehand that simply because the "Life and Times of Jesus the Messiah," by that learned scholar and able writer, Dr. Edersheim, whose recent loss is so much to be deplored, does not "translate" all the Gospel narratives into natural occurrences, therefore it is essentially bad history. The story has been the same throughout. The whole German critical school, from the venerable Karl Hase—and, much as I differ from his conclusions, I can not mention without a tribute of respect and gratitude the name of that great scholar, the veteran of all these controversies, whose "Leben Jesu," published several years before Strauss was heard of, is still, perhaps, the most valuable book of reference on the subject—all, from that eminent man downward, have, by their own repeated confession, started from the assumption that the miraculous is impossible, and that the Gospels must, by some device or other, be so interpreted as to explain it away. "Affection" there is and ought to be in orthodox writers for venerable, profound, and consoling beliefs; but they start from no such invincible prejudice, and they are pledged by their principles to accept whatever interpretation may be really most consonant with the facts.

I have only one word to say, finally, in reply to Prof. Huxley. I am very glad to hear that he has always advocated the reading of the Bible and the diffusion of its study among the people; but I must say that he goes to work in a very strange way in order to promote this result. If he could succeed in persuading people that the Gospels are untrustworthy collections of legends, made by unknown authors, that St. Paul's epistles were the writings of "a strange man," who had no sound capacity for judging of evidence, or, with Mrs. Ward's friends, that the Pentateuch is a late forgery of Jewish scribes, I do not think the people at large would be likely to follow his well-meant exhortations. But I venture to remind him that the English Church has anticipated his anxiety in this matter. Three hundred years ago, by one of the greatest strokes of real government ever exhibited, the public reading of the whole Bible was imposed upon Englishmen; and by the public reading of the lessons on Sunday alone, the chief portions of the Bible, from first to last, have become stamped upon the minds of English-speaking people in a degree in which, as the Germans themselves acknowledge,* they are far behind us. He has too much reason for his lament over the melancholy spectacle presented by the intestine quarrels of churchmen over matters of mere ceremonial. But when he argues from this that the clergy of our day "can have but little sympathy with the old evangelical doctrine of the 'open Bible,'" he might have remembered that our own generation of English divines has, by the labor of years, endeavored at all events, whether successfully or not, to place the most correct version possible of the Holy Scriptures in the hands of the English people. I agree with him most cordially in seeing in the wide diffusion and the unprejudiced study of that sacred volume the best security for "true religion and sound learning." It is in the open Bible of England, in the general familiarity of all classes of Englishmen and Englishwomen with it that the chief obstacle has been found to the spread of

* See the preface to Riehm's "Handwörterbuch."

the fantastic critical theories by which he is fascinated; and, instead of Englishmen translating the Bible into the language of their natural experiences, it will in the future, as in the past, translate them and their experiences into a higher and a supernatural region.

VII.

AN EXPLANATION TO PROF. HUXLEY.

By W. C. MAGEE,

BISHOP OF PETERBOROUGH.

IN the February number of this review Prof. Huxley put into the mouth of Mr. Frederic Harrison the following sentence: "In his [the agnostic's] place, as a sort of navy leveling the ground and cleansing it of such poor stuff as Christianity, he is a useful creature who deserves patting on the back—on condition that he does not venture beyond his last." The construction which I put upon these words—and of which I still think them quite capable—was that the professor meant to represent Mr. Harrison and himself as agreed upon the proper work of the agnostic, and as differing only as to whether he might or might not "venture beyond" that. On this supposition, my reference that he had called Christianity "sorry," or, as I ought to have said, "poor stuff" (the terms are, of course, equivalent), would have been perfectly correct.

On re-reading the sentence in question, however, in connection with its context, I see that it may more correctly be regarded as altogether ironical; and this from the professor's implied denial in his last article of the correctness of my version, I conclude that he intended it to be. I accordingly at once withdraw my statement, and express my regret for having made it. May I plead, however, as some excuse for my mistake, that this picture of himself when engaged in his agnostic labors is so wonderfully accurate and life-like that I might almost be pardoned for taking for a portrait what was only meant for a caricature, or for supposing that he had expressed in so many words the contempt which displays itself in so many of his utterances respecting the Christian faith?

Nevertheless I gladly admit that the particular expression I had ascribed to him is not to be reckoned among the already too numerous illustrations of what I had described as his "readiness to say unpleasant," and—after reading his last article—I must add, offensive "things."

With this explanation and apology I take my leave of the professor and of our small personal dispute—small, indeed, beside the infinitely graver and greater issues raised in his reply to the unanswered arguments of Dr. Wace.

I do not care to distract the attention of the public from these to a fencing-match with foils between Prof. Huxley and myself. In sight of Gethsemane and Calvary such a fencing-match seems to me out of place,

VIII

THE VALUE OF WITNESS TO THE MIRACULOUS.

BY PROF. THOMAS H. HUXLEY.

CHARLES, or more properly, Karl, King of the Franks, consecrated Roman emperor in St. Peter's, on Christmas day, A. D. 800, and known to posterity as the Great (chiefly by his agglutinative Gallicized denomination of Charlemagne), was a man great in all ways, physically and mentally. Within a couple of centuries after his death Charlemagne became the center of innumerable legends; and the myth-making process does not seem to have been sensibly interfered with by the existence of sober and truthful histories of the emperor and of the times which immediately preceded and followed his reign, by a contemporary writer who occupied a high and confidential position in his court, and in that of his successor. This was one Eginhard, or Einhard, who appears to have been born about A. D. 770, and spent his youth at the court, being educated along with Charles's sons. There is excellent contemporary testimony not only to Eginhard's existence, but to his abilities, and to the place which he occupied in the circle of the intimate friends of the great ruler whose life he subsequently wrote. In fact, there is as good evidence of Eginhard's existence, of his official position, and of his being the author of the chief works attributed to him, as can reasonably be expected in the case of a man who lived more than a thousand years ago, and was neither a great king nor a great warrior. These works are—1. "The Life of the Emperor Karl." 2. "The Annals of the Franks." 3. "Letters." 4. "The History of the Translation of the Blessed Martyrs of Christ, SS. Marcellinus and Petrus."

It is to the last, as one of the most singular and interesting records of the period during which the Roman world passed into that of the middle ages, that I wish to direct attention.* It was written in the ninth century, somewhere, apparently, about the year 830, when Eginhard, ailing in health and weary of political life, had withdrawn to the monastery of Seligenstadt, of which he was the founder. A manuscript copy of the work, made in the tenth century, and once the property of the monastery of St. Bavon on the Scheldt, of which Eginhard was abbot, is still extant, and there is no reason to believe that, in this copy, the original has been in any way interpolated or otherwise tampered with. The main features of the strange story contained in the "Historia Translationis" are set forth in the following pages, in which, in regard to all matters of importance, I shall adhere as closely as possible to Eginhard's own words:

While I was still at court, busied with secular affairs, I often thought of the leisure which I hoped one day to enjoy in a solitary place, far away from the crowd, with which the liberality of Prince Louis, whom I then served, had provided me. This place is situated in that part of Germany which lies between the Neckar and the Main,† and is nowadays called the Odenwald by those who live in and about it. And here having built, according to my capacity and resources, not only houses and permanent dwellings, but also a basilica fitted for the performance of divine service and of no mean style of construction, I began to think to what saint or martyr I could best dedicate it. A good deal of time had passed while my thoughts fluctuated about this matter, when it

* My citations are made from Teulet's "Einhardi omnia quæ extant opera," Paris, 1840-1843, which contains a biography of the author, a history of the text, with translations into French, and many valuable annotations.

† At present included in the duchies of Hesse-Darmstadt and Baden.

happened that a certain deacon of the Roman Church, named Deusdona, arrived at the court for the purpose of seeking the favor of the king in some affairs in which he was interested. He remained some time; and then having transacted his business, he was about to return to Rome, when one day, moved by courtesy to a stranger, we invited him to a modest refectory; and while talking of many things at table, mention was made of the translation of the body of the blessed Sebastian,* and of the neglected tombs of the martyrs, of which there is such a prodigious number at Rome; and the conversation having turned toward the dedication of our new basilica, I began to inquire how it might be possible for me to obtain some of the true relics of the saints which rest at Rome. He at first hesitated, and declared that he did not know how that could be done. But observing that I was both anxious and curious about the subject, he promised to give me an answer some other day.

When I returned to the question, some time afterward, he immediately drew from his bosom a paper, which he begged me to read when I was alone, and to tell him what I was disposed to think of that which was therein stated. I took the paper, and, as he desired, read it alone and in secret. (Cap. i, 2, 3.)

I shall have occasion to return to Deacon Deusdona's conditions, and to what happened after Eginhard's acceptance of them. Suffice it, for the present, to say that Eginhard's notary, Ratleicus (Ratleig), was dispatched to Rome and succeeded in securing two bodies, supposed to be those of the holy martyrs Marcellinus and Petrus; and when he had got as far on his homeward journey as the Burgundian town of Solothurn or Soleure,† notary Ratleig dispatched to his master, at St. Bavon, a letter announcing the success of his mission.

As soon as by reading it I was assured of the arrival of the saints, I dispatched a confidential messenger to Maestricht, to gather together priests, other clerics, and also laymen, to go out to meet the coming saints as speedily as possible. And he and his companions, having lost no time, after a few days met those who had charge of the saints at Solothurn. Joined with them, and with a vast crowd of people who gathered from all parts, singing hymns, and amid great and universal rejoicings, they traveled quickly to the city of Argentoratum, which is now called Strasburg. Thence embarking on the Rhine they came to the place called Portus,‡ and landing on the east bank of the river, at the fifth station, thence they arrived at Michilistadt,‡‡ accompanied by an immense multitude, praising God. This place is in that forest of Germany which in modern times is called the Odenwald, and about six leagues from the Main. And here, having found a basilica recently built by me, but not yet consecrated, they carried the sacred remains into it and deposited them therein, as if it were to be their final resting-place. As soon as all this was reported to me, I traveled thither as quickly as I could. (Cap. ii, 14.)

Three days after Eginhard's arrival began the series of wonderful events which he narrates, and for which we have his personal guarantee. The first thing that he notices is the dream of a servant of Ratleig the notary, who, being set to watch the holy relics in the church after vespers, went to sleep, and during his slumbers had a vision of two pigeons, one white and one gray and white, which came and sat upon the bier over the relics; while, at the same time, a voice ordered the man to tell his master that the holy martyrs had chosen another resting-place and desired to be transported thither without delay.

Unfortunately, the saints seem to have forgotten to mention where they wished to go, and, with the most anxious desire to gratify their smallest wishes, Eginhard was naturally greatly perplexed what to do. While in this state of mind, he was one day contemplating his "great and wonderful treasure, more precious than all the gold in the world," when it struck him that the chest in which the relics were contained was quite unworthy of its contents; and after vespers he gave orders to one of the sacristans to take the measure of the chest in order that a more fitting shrine might be constructed. The man, having lighted a wax candle and raised the pall which covered the relics, in order to carry out his master's orders, was astonished and terrified to observe that the chest was covered with a blood-like exudation (*locutum*

* This took place in the year 826 A. D. The relics were brought from Rome and deposited in the Church of St. Madardus at Soissons.

† Now included in western Switzerland.

‡ Probably, according to Teulet, the present Sandhofer-fahrt, a little below the embouchure of the Neckar.

‡‡ The present Michilistadt, thirty miles northeast of Heidelberg.

mirum in modum humore sanguineo undique distillantem), and at once sent a message to Eginhard.

Then I and those priests who accompanied me beheld this stupendous miracle, worthy of all admiration. For just as when it is going to rain, pillars and slabs and marble images exude moisture, and, as it were, sweat, so the chest which contained the most sacred relics was found moist with the blood exuding on all sides. (Cap. ii, 16.)

Three days' fast was ordained in order that the meaning of the portent might be ascertained. All that happened, however, was that at the end of that time the "blood," which had been exuding in drops all the while, dried up. Eginhard is careful to say that the liquid "had a saline taste, something like that of tears, and was thin as water, though of the color of true blood," and he clearly thinks this satisfactory evidence that it was blood.

The same night another servant had a vision, in which still more imperative orders for the removal of the relics were given; and, from that time forth, "not a single night passed without one, two, or even three of our companions receiving revelations in dreams that the bodies of the saints were to be transferred from that place to another." At last a priest, Hildfrid, saw, in a dream, a venerable white-haired man in a priest's vestments, who bitterly reproached Eginhard for not obeying the repeated orders of the saints, and upon this the journey was commenced. Why Eginhard delayed obedience to these repeated visions so long does not appear. He does not say so in so many words, but the general tenor of the narrative leads one to suppose that Mulinheim (afterward Seligenstadt) is the "solitary place" in which he had built the church which awaited dedication. In that case all the people about him would know that he desired that the saints should go there. If a glimmering of secular sense led him to be a little suspicious about the real cause of the unanimity of the visionary beings who manifested themselves to his *entourage* in favor of moving on, he does not say so.

At the end of the first day's journey the precious relics were deposited in the church of St. Martin, in the village of Ostheim. Hither a paralytic nun (*sanctimonialis quædam paralytica*) of the name of Ruodlang was brought in a car by her friends and relatives from a monastery a league off. She spent the night watching and praying by the bier of the saints; "and health returning to all her members, on the morrow she went back to her place whence she came, on her feet, nobody supporting her, or in any way giving her assistance." (Cap. ii, 19).

On the second day the relics were carried to Upper Mulinheim, and finally, in accordance with the orders of the martyrs, deposited in the church of that place, which was therefore renamed Seligenstadt. Here, Daniel, a beggar boy of fifteen, and so bent that "he could not look at the sky without lying on his back," collapsed and fell down during the celebration of the mass. "Thus he lay a long time, as if asleep, and all his limbs straightening and his flesh strengthening (*recepta firmitate nervorum*), he arose before our eyes, quite well." (Cap. ii, 20.)

Some time afterward an old man entered the church on his hands and knees, being unable to use his limbs properly:

He, in the presence of all of us, by the power of God and the merits of the blessed martyrs, in the same hour in which he entered was so perfectly cured that he walked without so much as a stick. And he said that, though he had been deaf for five years, his deafness had ceased along with the palsy. (Cap. iii, 32.)

Eginhard was now obliged to return to the court at Aix-la-Chapelle, where his duties kept him through the winter; and he is careful to point out that the later miracles which he proceeds to speak of are known to him only at second hand. But, as he naturally observes, having seen such wonderful events with his own eyes, why should he doubt similar narrations when they are received from trustworthy sources?

Wonderful stories these are indeed, but as they are, for the most part, of the same general character as those already recounted, they may be passed over. There is, however, an account of a possessed maiden which is worth attention.

This is set forth in a memoir, the principal contents of which are the speeches of a demon who declared that he possessed the singular appellation of "Wiggo," and revealed himself in the presence of many witnesses, before the altar, close to the relics of the blessed martyrs. It is noteworthy that the revelations appear to have been made in the shape of replies to the questions of the exorcising priest, and there is no means of judging how far the answers are really only the questions to which the patient replied yes or no.

The possessed girl, about sixteen years of age, was brought by her parents to the basilica of the martyrs.

When she approached the tomb containing the sacred bodies, the priest, according to custom, read the formula of exorcism over her head. When he began to ask how and when the demon had entered her, she answered, not in the tongue of the barbarians, which alone the girl knew, but in the Roman tongue. And when the priest was astonished and asked how she came to know Latin, when her parents, who stood by, were wholly ignorant of it, "Thou hast never seen my parents," was the reply. To this the priest, "Whence art thou, then, if these are not thy parents?" And the demon, by the mouth of the girl, "I am a follower and disciple of Satan, and for a long time I was gatekeeper (janitor) in hell; but, for some years, along with eleven companions, I have ravaged the kingdom of the Franks." (Cap. v, 49.)

He then goes on to tell how they blasted the crops and scattered pestilence among beasts and men, because of the prevalent wickedness of the people.*

The enumeration of all these iniquities, in oratorical style, takes up a whole octavo page; and at the end it is stated, "All these things the demon spoke in Latin by the mouth of the girl."

And when the priest imperatively ordered him to come out, "I shall go," said he, "not in obedience to you, but on account of the power of the saints, who do not allow me to remain any longer." And, having said this, he threw the girl down on the floor and there compelled her to lie prostrate for a time, as though she slumbered. After a little while, however, he going away, the girl, by the power of Christ and the merits of the blessed martyrs, as it were awakening from sleep, rose up quite well, to the astonishment of all present; nor after the demon had gone out was she able to speak Latin: so that it was plain enough that it was not she who had spoken in that tongue, but the demon by her mouth. (Cap. v, 51.)

If the "Historia Translationis" contained nothing more than has been, at present, laid before the reader, disbelief in the miracles of which it gives so precise and full a record might well be regarded as hyper-skepticism. It might fairly be said: "Here you have a man, whose high character, acute intelligence, and large instruction are certified by eminent contemporaries; a man who stood high in the confidence of one of the greatest rulers of any age, and whose other works prove him to be an accurate and judicious narrator of ordinary events. This man tells you, in language which bears the stamp of sincerity, of things which happened within his own knowledge, or within that of persons in whose veracity he has entire confidence, while he appeals to his sovereign and the court as witnesses of others; what possible ground can there be for disbelieving him?"

* In the middle ages one of the most favorite accusations against witches was that they committed just these enormities.

Well, it is hard upon Eginhard to say so, but it is exactly the honesty and sincerity of the man which are his undoing as a witness to the miraculous. He himself makes it quite obvious that when his profound piety comes on the stage, his good sense and even his perception of right and wrong make their exit. Let us go back to the point at which we left him, secretly perusing the letter of Deacon Deusdona. As he tells us, its contents were—

that he (the deacon) had many relics of saints at home, and that he would give them to me if I would furnish him with the means of returning to Rome; he had observed that I had two mules, and, if I would let him have one of them and would dispatch with him a confidential servant to take charge of the relics, he would at once send them to me. This plausibly expressed proposition pleased me, and I made up my mind to test the value of the somewhat ambiguous promise at once;* so giving him the mule and money for his journey I ordered my notary Ratleig (who already desired to go to Rome to offer his devotions there) to go with him. Therefore, having left Aix-la-Chapelle (where the emperor and his court resided at the time) they came to Soissons. Here they spoke with Hildoin, abbot of the monastery of St. Medardus, because the said deacon had assured him that he had the means of placing in his possession the body of the blessed Tiburtius the martyr. Attracted by which promises he (Hildoin) sent with them a certain priest, Hunus by name, a sharp man (*hominem callidum*), whom he ordered to receive and bring back the body of the martyr in question. And so, resuming their journey, they proceeded to Rome as fast as they could. (Cap. 1, 3.)

Unfortunately, a servant of the notary, one Reginbald, fell ill of a tertian fever, and impeded the progress of the party. However, this piece of adversity had its sweet uses; for, three days before they reached Rome, Reginbald had a vision. Somebody habited as a deacon appeared to him and asked why his master was in such a hurry to get to Rome; and when Reginbald explained their business, this visionary deacon, who seems to have taken the measure of his brother in the flesh with some accuracy, told him not by any means to expect that Deusdona would fulfill his promises. Moreover, taking the servant by the hand, he led him to the top of a high mountain, and, showing him Rome (where the man had never been), pointed out a church, adding: "Tell Ratleig the thing he wants is hidden there; let him get it as quickly as he can and go back to his master"; and, by way of a sign that the order was authoritative, the servant was promised that from that time forth his fever should disappear. And as the fever did vanish to return no more, the faith of Eginhard's people in Deacon Deusdona naturally vanished with it (*et fidem diaconi promissis non haberent*). Nevertheless, they put up at the deacon's house near St. Peter da Vincula. But time went on and no relics made their appearance, while the notary and the priest were put off with all sorts of excuses—the brother to whom the relics had been confided was gone to Beneventum and not expected back for some time, and so on—until Ratleig and Hunus began to despair, and were minded to return, *infecto negotio*.

But my notary, calling to mind his servant's dream, proposed to his companion that they should go to the cemetery which their host had talked about without him. So, having found and hired a guide, they went in the first place to the basilica of the blessed Tiburtius in the Via Labicana, about three thousand paces from the town, and cautiously and carefully inspected the tomb of that martyr, in order to discover whether it could be opened without any one being the wiser. Then they descended into the adjoining crypt, in which the bodies of the blessed martyrs of Christ, Marcellinus and Petrus, were buried; and, having made out the nature of their tomb, they went away thinking their host would not know what they had been about. But things fell out differently from what they had imagined. (Cap. 1, 7.)

In fact, Deacon Deusdona, who doubtless kept an eye on his guests, knew all about their manœuvres and made haste to offer his services, in order that, "with the help of God" (*si Deus votis eorum favere dignaretur*), they should all work together. The deacon was evidently alarmed lest they should succeed without his help.

* It is pretty clear that Eginhard had his doubts about the deacon, whose pledge he qualifies as *sponsiones incertæ*. But, to be sure, he wrote after events which fully justified scepticism.

So, by way of preparation for the contemplated *vol avec effraction*, they fasted three days; and then, at night, without being seen, they betook themselves to the basilica of St. Tiburtius, and tried to break open the altar erected over his remains. But the marble proving too solid, they descended to the crypt, and "having invoked our Lord Jesus Christ and adored the holy martyrs," they proceeded to prise off the stone which covered the tomb, and thereby exposed the body of the most sacred martyr Marcellinus, "whose head rested on a marble tablet on which his name was inscribed." The body was taken up with the greatest veneration, wrapped in a rich covering, and given over to the keeping of the deacon and his brother Lunison, while the stone was replaced with such care that no sign of the theft remained.

As sacrilegious proceedings of this kind were punishable with death by the Roman law, it seems not unnatural that Deacon Deusdona should have become uneasy, and have urged Ratleig to be satisfied with what he had got and be off with his spoils. But the notary having thus cleverly captured the blessed Marcellinus, thought it a pity he should be parted from the blessed Petrus, side by side with whom he had rested for five hundred years and more in the same sepulchre (as Eginhard pathetically observes); and the pious man could neither eat, drink, nor sleep, until he had compassed his desire to reunite the saintly colleagues. This time, apparently in consequence of Deusdona's opposition to any further resurrectionist doings, he took counsel with a Greek monk, one Basil, and, accompanied by Hunus, but saying nothing to Deusdona, they committed another sacrilegious burglary, securing this time, not only the body of the blessed Petrus, but a quantity of dust, which they agreed the priest should take, and tell his employer that it was the remains of the blessed Tiburtius.

How Deusdona was "squared," and what he got for his not very valuable complicity in these transactions, does not appear. But at last the relics were sent off in charge of Lunison, the brother of Deusdona, and the priest Hunus, as far as Pavia, while Ratleig stopped behind for a week to see if the robbery was discovered, and, presumably, to act as a blind if any hue and cry were raised. But, as everything remained quiet, the notary betook himself to Pavia, where he found Lunison and Hunus awaiting his arrival. The notary's opinion of the character of his worthy colleagues, however, may be gathered from the fact that, having persuaded them to set out in advance along a road which he told them he was about to take, he immediately adopted another route, and, traveling by way of St. Maurice and the Lake of Geneva, eventually reached Soleure.

Eginhard tells all this story with the most *naïve* air of unconsciousness that there is anything remarkable about an abbot, and a high officer of state to boot, being an accessory both before and after the fact to a most gross and scandalous act of sacrilegious and burglarious robbery. And an amusing sequel to the story proves that, where relics were concerned, his friend Hildoin, another high ecclesiastical dignitary, was even less scrupulous than himself.

On going to the palace early one morning, after the saints were safely bestowed at Seligenstadt, he found Hildoin waiting for an audience in the emperor's antechamber, and began to talk to him about the miracle of the bloody exudation. In the course of conversation, Eginhard happened to allude to the remarkable fineness of the

garment of the blessed Marcellinus. Whereupon Abbot Hildoin replied (to Eginhard's stupefaction) that his observation was quite correct. Much astonished at this remark from a person who was supposed not to have seen the relics, Eginhard asked him how he knew that. Upon this, Hildoin saw that he had better make a clean breast of it, and he told the following story, which he had received from his priestly agent, Hunus: While Hunus and Lunison were at Pavia, waiting for Eginhard's notary, Hunus (according to his own account) had robbed the robbers. The relics were placed in a church, and a number of laymen and clerics, of whom Hunus was one, undertook to keep watch over them. One night, however, all the watchers, save the wide-awake Hunus, went to sleep; and then, according to the story which this "sharp" ecclesiastic foisted upon his patron—

It was borne in upon his mind that there must be some great reason why all the people, except himself, had suddenly become somnolent; and, determining to avail himself of the opportunity thus offered (*oblata occasione utendum*), he rose and, having lighted a candle, silently approached the chests. Then, having burned through the threads of the seals with the flame of the candle, he quickly opened the chests, which had no locks; * and, taking out portions of each of the bodies which were thus exposed, he closed the chests and connected the burned ends of the threads with the seals again, so that they appeared not to have been touched; and, no one having seen him, he returned to his place. (Cap. iii, 23.)

Hildoin went on to tell Eginhard that Hunus at first declared to him that these purloined relics belonged to St. Tiburtius; but afterwards confessed, as a great secret, how he had come by them, and he wound up his discourse thus:

They have a place of honor beside St. Medardus, where they are worshiped with great veneration by all the people; but whether we may keep them or not is for your judgment. (Cap. iii, 23.)

Poor Eginhard was thrown into a state of great perturbation of mind by this revelation. An acquaintance of his had recently told him of a rumor that was spread about, that Hunus had contrived to abstract *all* the remains of SS. Marcellinus and Petrus while Eginhard's agents were in a drunken sleep; and that, while the real relics were in Abbot Hildoin's hands at St. Medardus, the shrine at Seligenstadt contained nothing but a little dust. Though greatly annoyed by this "execrable rumor, spread everywhere by the subtlety of the devil," Eginhard had doubtless comforted himself by his supposed knowledge of its falsity, and he only now discovered how considerable a foundation there was for the scandal. There was nothing for it but to insist upon the return of the stolen treasures. One would have thought that the holy man, who had admitted himself to be knowingly a receiver of stolen goods, would have made instant restitution and begged only for absolution. But Eginhard intimates that he had very great difficulty in getting his brother abbot to see that even restitution was necessary.

Hildoin's proceedings were not of such nature as to lead any one to place implicit trust in anything he might say; still less had his agent, priest Hunus, established much claim to confidence; and it is not surprising that Eginhard should have lost no time in summoning his notary and Lunison to his presence, in order that he might hear what they had to say about the business. They, however, at once protested that priest Hunus's story was a parcel of lies, and that after the relics left Rome no one had any opportunity of meddling with them. Moreover, Lunison, throwing himself at Eginhard's feet, confessed with many tears what actually took place. It will be remembered that, after the body of St. Marcellinus was abstracted from its tomb, Ratleig

* The words are *ecrinia sine clave*, which seem to mean "having no key." But the circumstances forbid the idea of breaking open.

deposited it in the house of Deusdona, in charge of the latter's brother, Lunison. But Hunus, being very much disappointed that he could not get hold of the body of St. Tiburtius, and afraid to go back to his abbot empty-handed, bribed Lunison with four pieces of gold and five of silver to give him access to the chest. This Lunison did, and Hunus helped himself to as much as would fill a gallon measure (*vas sextarii mensuram*) of the sacred remains. Eginhard's indignation at the "rapine" of this "nequissimus nebulo" is exquisitely droll. It would appear that the adage about the receiver being as bad as the thief was not current in the ninth century.

Let us now briefly sum up the history of the acquisition of the relics. Eginhard makes a contract with Deusdona for the delivery of certain relics which the latter says he possesses. Eginhard makes no inquiry how he came by them; otherwise, the transaction is innocent enough.

Deusdona turns out to be a swindler, and has no relics. Thereupon Eginhard's agent, after due fasting and prayer, breaks open the tombs and helps himself.

Eginhard discovers, by the self-betrayal of his brother abbot, Hildoin, that portions of his relics have been stolen and conveyed to the latter. With much ado he succeeds in getting them back.

Hildoin's agent, Hunus, in delivering these stolen goods to him, at first declared that they were the relics of St. Tiburtius, which Hildoin desired him to obtain; but afterward invented a story of their being the product of a theft, which the providential drowsiness of his companions enabled him to perpetrate from the relics which Hildoin well knew were the property of his friend.

Lunison, on the contrary, swears that all this story is false, and that he himself was bribed by Hunus to allow him to steal what he pleased from the property confided to his own and his brother's care by their guest Ratleig. And the honest notary himself seems to have no hesitation about lying and stealing to any extent, where the acquisition of relics is the object in view.

For a parallel to these transactions one must read a police report of the doings of a "long firm" or of a set of horse-coupers; yet Eginhard seems to be aware of nothing, but that he has been rather badly used by his friend Hildoin and the "nequissimus nebulo" Hunus.

It is not easy for a modern Protestant, still less for any one who has the least tincture of scientific culture, whether physical or historical, to picture to himself the state of mind of a man of the ninth century, however cultivated, enlightened, and sincere he may have been. His deepest convictions, his most cherished hopes, were bound up in the belief of the miraculous. Life was a constant battle between saints and demons for the possession of the souls of men. The most superstition among our modern countrymen turn to supernatural agencies only when natural causes seem insufficient; to Eginhard and his friends the supernatural was the rule, and the sufficiency of natural causes was allowed only when there was nothing to suggest others.

Moreover, it must be recollected that the possession of miracle-working relics was greatly coveted, not only on high but on very low grounds. To a man like Eginhard, the mere satisfaction of the religious sentiment was obviously a powerful attraction. But, more than this, the possession of such a treasure was an immense practical advantage. If the saints were duly flattered and worshiped, there was no

telling what benefits might result from their interposition on your behalf. For physical evils, access to the shrine was like the grant of the use of a universal pill and ointment manufactory; and pilgrimages thereto might suffice to cleanse the performers from any amount of sin. A letter to Lupus, subsequently abbot of Ferrara, written while Eginhard was smarting under the grief caused by the loss of his much-loved wife Imma, affords a striking insight into the current view of the relation between the glorified saints and their worshipers. The writer shows that he is anything but satisfied with the way in which he has been treated by the blessed martyrs whose remains he has taken such pains to "convey" to Seligenstadt, and to honor there as they would never have been honored in their Roman obscurity:

It is an aggravation of my grief and a reopening of my wound, that our vows have been of no avail, and that the faith which we placed in the merits and intervention of the martyrs has been utterly disappointed.

We may admit, then, without impeachment of Eginhard's sincerity, or of his honor under all ordinary circumstances, that when piety, self-interest, the glory of the Church in general, and that of the church at Seligenstadt in particular, all pulled one way, even the work-a-day principles of morality were disregarded, and *a fortiori*, anything like proper investigation of the reality of the alleged miracles was thrown to the winds.

And if this was the condition of mind of such a man as Eginhard, what is it not legitimate to suppose may have been that of Deacon Deusdona, Lunison, Hunus, and company, thieves and cheats by their own confession; or of the probably hysterical nun; or of the professional beggars, for whose incapacity to walk and straighten themselves there is no guarantee but their own? Who is to make sure that the exorcist of the demon Wiggo was not just such another priest as Hunus; and is it not at least possible, when Eginhard's servants dreamed night after night in such a curiously coincident fashion, that a careful inquirer might have found they were very anxious to please their master?

Quite apart from deliberate and conscious fraud (which is a rarer thing than is often supposed), people whose mythopœic faculty is once stirred are capable of saying the thing that is not, and of acting as they should not, to an extent which is hardly imaginable by persons who are not so easily affected by the contagion of blind faith. There is no falsity so gross that honest men, and, still more, virtuous women, anxious to promote a good cause, will not lend themselves to it without any clear consciousness of the moral bearings of what they are doing.

The cases of miraculously effected cures of which Eginhard is ocular witness appear to belong to classes of disease in which malingering is possible or hysteria presumable. Without modern means of diagnosis, the names given to them are quite worthless. One "miracle", however, in which the patient was cured by the mere sight of the church in which the relics of the blessed martyrs lay, is an unmistakable case of dislocation of the lower jaw in a woman; and it is obvious that, as not unfrequently happens in such accidents to weakly subjects, the jaw slipped suddenly back into place, perhaps in consequence of a jolt, as the woman rode toward the church. (Cap. v, 53).*

* Eginhard speaks with lofty contempt of the "*vana ac superstitiosa præsumptio*" of the poor woman's companions in trying to alleviate her suffering with "herbs and frivolous incantations." Vain enough, no doubt, but the "*mullercoise*" might have returned the epithet "superstitious" with interest.

There is also a good deal said about a very questionable blind man—one Albricus (Alberich ?)—who, having been cured, not of his blindness, but of another disease under which he labored, took up his quarters at Seligenstadt, and came out as a prophet, inspired by the arch-angel Gabriel. Eginhard intimates that his prophecies were fulfilled; but, as he does not state exactly what they were or how they were accomplished, the statement must be accepted with much caution. It is obvious that he was not the man to hesitate to “ease” a prophecy until it fitted, if the credit of the shrine of his favorite saints could be increased by such a procedure. There is no impeachment of his honor in the supposition. The logic of the matter is quite simple, if somewhat sophistical. The holiness of the church of the martyrs guarantees the reality of the appearance of the archangel Gabriel there, and what the archangel says must be true. Therefore, if anything seems to be wrong, that must be the mistake of the transmitter; and, in justice to the archangel, it must be suppressed or set right. This sort of “reconciliation” is not unknown in quite modern times, and among people who would be very much shocked to be compared with a “benighted papist” of the ninth century.

The readers of this review are, I imagine, very largely composed of people who would be shocked to be regarded as anything but enlightened Protestants. It is not unlikely that those of them who have accompanied me thus far may be disposed to say: “Well, this is all very amusing as a story; but what is the practical interest of it? We are not likely to believe in miracles worked by the spolia of SS. Marcellinus and Petrus, or by those of any other saints in the Roman calendar.”

The practical interest is this: If you do not believe in these miracles, recounted by a witness whose character and competency are firmly established, whose sincerity can not be doubted, and who appeals to his sovereign and other contemporaries as witnesses of the truth of what he says, in a document of which a MS. copy exists, probably dating within a century of the author's death, why do you profess to believe in stories of a like character which are found in documents, of the dates and of the authorship of which nothing is certainly determined, and no known copies of which come within two or three centuries of the events they record? If it be true that the four Gospels and the Acts were written by Matthew, Mark, Luke, and John, all that we know of these persons comes to nothing in comparison with our knowledge of Eginhard; and not only is there no proof that the traditional authors of these works wrote them, but very strong reasons to the contrary may be alleged. If, therefore, you refuse to believe that “Wiggo” was cast out of the possessed girl on Eginhard's authority, with what justice can you profess to believe that the legion of devils were cast out of the man among the tombs of the Gadarenes? And if, on the other hand, you accept Eginhard's evidence, why do you laugh at the supposed efficacy of relics and the saint-worship of the modern Romanists? It can not be pretended, in the face of all evidence, that the Jews of the year 30, or thereabout, were less imbued with the belief in the supernatural than were the Franks of the year A. D. 800. The same influences were at work in each case, and it is only reasonable to suppose that the results were the same. If the evidence of Eginhard is insufficient to lead reasonable men to believe

in the miracles he relates, *a fortiori*, the evidence afforded by the Gospels and the Acts must be so.*

But it may be said that no serious critic denies the genuineness of the four great Pauline Epistles—Galatians, First and Second Corinthians, and Romans—and that, in three out of these four, Paul lays claim to the power of working miracles. Must we suppose, therefore, that the Apostle to the Gentiles has stated that which is false? But to how much does this so-called claim amount? It may mean much or little. Paul nowhere tells us what he did in this direction, and, in his sore need to justify his assumption of apostleship against the sneers of his enemies, it is hardly likely that, if he had any very striking cases to bring forward, he would have neglected evidence so well calculated to put them to shame.

And, without the slightest impeachment of Paul's veracity, we must further remember that his strongly marked mental characteristics, displayed in unmistakable fashion in these Epistles, are anything but those which would justify us in regarding him as a critical witness respecting matters of fact, or as a trustworthy interpreter of their significance. When a man testifies to a miracle, he not only states a fact, but he adds an interpretation of the fact. We may admit his evidence as to the former, and yet think his opinion as to the latter worthless. If Eginhard's calm and objective narrative of the historical events of his time is no guarantee for the soundness of his judgment where the supernatural is concerned, the fervid rhetoric of the Apostle of the Gentiles, his absolute confidence in the "inner light," and the extraordinary conceptions of the nature and requirements of logical proof which he betrays in page after page of his Epistles, afford still less security.

There is a comparative modern man who shared to the full Paul's trust in the "inner light," and who, though widely different from the fiery evangelist of Tarsus in various obvious particulars, yet, if I am not mistaken, shares his deepest characteristics. I speak of George Fox, who separated himself from the current Protestantism of England in the seventeenth century as Paul separated himself from the Judaism of the first century, at the bidding of the "inner light"—who went through persecutions as serious as those which Paul enumerates, who was beaten, stoned, cast out for dead, imprisoned nine times, sometimes for long periods, in perils on land and perils at sea. George Fox was an even more widely traveled missionary, and his success in founding congregations, and his energy in visiting them, not merely in Great Britain and Ireland and the West India Islands, but on the continent of Europe and that of North America, was no less remarkable. A few years after Fox began to preach there were reckoned to be a thousand Friends in prison in the various jails of England; at his death, less than fifty years after the foundation of the sect, there were seventy thousand of them in the United Kingdom. The cheerfulness with which these people—women as well as men—underwent martyrdom in this country and in the New England States is one of the most remarkable facts in the history of religion.

* Of course, there is nothing new in this argument; but it does not grow weaker by age. And the case of Eginhard is far more instructive than that of Augustine, because the former has so very frankly, though incidentally, revealed to us not only his own mental and moral habits, but those of the people about him.

No one who reads the voluminous autobiography of "Honest George" can doubt the man's utter truthfulness; and though, in his multitudinous letters, he but rarely rises far above the incoherent commonplaces of a street preacher, there can be no question of his power as a speaker, nor any doubt as to the dignity and attractiveness of his personality, or of his possession of a large amount of practical good sense and governing faculty.

But that George Fox had full faith in his own powers as a miracle-worker, the following passage of his autobiography (to which others might be added) demonstrates:

Now after I was set at liberty from Nottingham gaol (where I had been kept prisoner a pretty long time) I traveled as before, in the work of the Lord. And coming to Mansfield Woodhouse, there was a distracted woman under a doctor's hand, with her hair let loose all about her ears; and he was about to let her blood, she being first bound, and many people being about her, holding her by violence; but he could get no blood from her. And I desired them to unbind her and let her alone; for they could not touch the spirit in her by which she was tormented. So they did unbind her, and I was moved to speak to her, and in the name of the Lord to bid her be quiet and still. And she was so. And the Lord's power settled her mind and she mended; and afterwards received the truth and continued in it to her death. And the Lord's name was honoured; to whom the glory of all his works belongs. Many great and wonderful things were wrought by the heavenly power in those days. For the Lord made bare his omnipotent arm and manifested his power to the astonishment of many; by the healing virtue whereof many have been delivered from great infirmities and the devils were made subject through his name: of which particular instances might be given beyond what this unbelieving age is able to receive or bear.*

It needs no long study of Fox's writings, however, to arrive at the conviction that the distinction between subjective and objective verities had not the same place in his mind as it has in that of ordinary mortals. When an ordinary person would say "I thought so and so," or "I made up my mind to do so and so," George Fox says "it was opened to me," or "at the command of God I did so and so." "Then at the command of God on the ninth day of the seventh month 1643 [Fox being just nineteen] I left my relations and brake off all familiarity or friendship with young or old." "About the beginning of the year 1647 I was moved of the Lord to go into Darbyshire." Fox hears voices and he sees visions, some of which he brings before the reader with apocalyptic power in simple and strong English, alike untutored and undefiled, of which, like John Bunyan, his contemporary, he was a master.

"And one morning, as I was sitting by the fire, a great cloud came over me, and a temptation beset me; and I sate still. And it was said, *All things come by Nature*. And the elements and stars came over me; so that I was in a manner quite clouded with it. . . . And, as I sate still under it, and let it alone, a living hope arose in me, and a true voice arose in me which said, *There is a living God who made all things*. and immediately the cloud and the temptation vanished away, and life rose over it all, and my heart was glad and I praised the Living God" (p. 13).

If George Fox could speak as he proves in this and some other passages he could write, his astounding influence on the contemporaries of Milton and of Cromwell is no mystery. But this modern reproduction of the ancient prophet, with his "Thus saith the Lord," "This is the work of the Lord," steeped in supernaturalism and glorying in blind faith, is the mental antipodes of the philosopher, founded in naturalism and a fanatic for evidence, to whom these affirmations inevitably suggest the previous question: "How do you know that the Lord saith it?" "How do you know that the Lord doeth it?"

* "A Journal or Historical Account of the Life, Travels, Sufferings, and Christian Experiences, of George Fox," ed. 1, 1694, pp. 27, 28.

and who is compelled to demand that rational ground for belief without which, to the man of science, assent is merely an immoral pretense.

And it is this rational ground of belief which the writers of the Gospels, no less than Paul, and Eginhard, and Fox, so little dream of offering that they would regard the demand for it as a kind of blasphemy.

IX.

AGNOSTICISM AND CHRISTIANITY.

BY PROF. THOMAS H. HUXLEY.

Nemo ergo ex me scire querat, quod me nescire scio, nisi forte ut nescire discat.—Augustinus, De Civ. Dei, xii, 7.*

CONTROVERSY, like most things in this world, has a good and a bad side. On the good side, it may be said that it stimulates the wits, tends to clear the mind, and often helps those engaged in it to get a better grasp of their subject than they had before; while, mankind being essentially fighting animals, a contest leads the public to interest themselves in questions to which, otherwise, they would give but a languid attention. On the bad side, controversy is rarely found to sweeten the temper, and generally tends to degenerate into an exchange of more or less effective sarcasms. Moreover, if it is long continued, the original and really important issues are apt to become obscured by disputes on the collateral and relatively insignificant questions which have cropped up in the course of the discussion. No doubt both of these aspects of controversy have manifested themselves in the course of the debate which has been in progress, for some months, in these pages. So far as I may have illustrated the second, I express repentance and desire absolution; and I shall endeavor to make amends for any foregone lapses by an endeavor to exhibit only the better phase in these concluding remarks.

The present discussion has arisen out of the use, which has become general in the last few years, of the terms "agnostic" and "agnosticism."

The people who call themselves "agnostics" have been charged with doing so because they have not the courage to declare themselves "infidels." It has been insinuated that they have adopted a new name in order to escape the unpleasantness which attaches to their proper denomination. To this wholly erroneous imputation I have replied by showing that the term "agnostic" did, as a matter of fact, arise in a manner which negatives it; and my statement has not been, and can not be, refuted. Moreover, speaking for myself, and without impugning the right of any other person to use the term in another sense, I further say that agnosticism is not properly described as a "negative" creed, nor indeed as a creed of any kind, except in so far as it expresses absolute faith in the validity of a principle which is as much ethical as intellectual. This principle may be stated in various

* Let no one therefore seek to know from me what I know I do not know, except in order to learn not to know.

ways, but they all amount to this: that it is wrong for a man to say that he is certain of the objective truth of any proposition unless he can produce evidence which logically justifies that certainty. This is what agnosticism asserts; and, in my opinion, it is all that is essential to agnosticism. That which agnostics deny and repudiate as immoral is the contrary doctrine, that there are propositions which men ought to believe, without logically satisfactory evidence; and that reprobation ought to attach to the profession of disbelief in such inadequately supported propositions. The justification of the agnostic principle lies in the success which follows upon its application, whether in the field of natural or in that of civil history; and in the fact that, so far as these topics are concerned, no sane man thinks of denying its validity.

Still speaking for myself, I add that, though agnosticism is not, and can not be, a creed, except in so far as its general principle is concerned; yet that the application of that principle results in the denial of, or the suspension of judgment concerning, a number of propositions respecting which our contemporary ecclesiastical "gnostics" profess entire certainty. And in so far as these ecclesiastical persons can be justified in the old-established custom (which many nowadays think more honored in the breach than the observance) of using opprobrious names to those who differ from them, I fully admit their right to call me and those who think with me "infidels"; all I have ventured to urge is that they must not expect us to speak of ourselves by that title.

The extent of the region of the uncertain, the number of the problems the investigation of which ends in a verdict of not proven, will vary according to the knowledge and the intellectual habits of the individual agnostic. I do not very much care to speak of anything as unknowable. What I am sure about is that there are many topics about which I know nothing, and which, so far as I can see, are out of reach of my faculties. But whether these things are knowable by any one else is exactly one of those matters which is beyond my knowledge, though I may have a tolerably strong opinion as to the probabilities of the case. Relatively to myself, I am quite sure that the region of uncertainty—the nebulous country in which words play the part of realities—is far more extensive than I could wish. Materialism and idealism; theism and atheism; the doctrine of the soul and its mortality or immortality—appear in the history of philosophy like the shades of Scandinavian heroes, eternally slaying one another and eternally coming to life again in a metaphysical "Nifelheim." It is getting on for twenty-five centuries, at least, since mankind began seriously to give their minds to these topics. Generation after generation, philosophy has been doomed to roll the stone up hill; and, just as all the world swore it was at the top, down it has rolled to the bottom again. All this is written in innumerable books; and he who will toil through them will discover that the stone is just where it was when the work began. Hume saw this; Kant saw it; since their time, more and more eyes have been cleansed of the films which prevented them from seeing it; until now the weight and number of those who refuse to be the prey of verbal mystification has begun to tell in practical life.

It was inevitable that a conflict should arise between agnosticism and theology; or rather I ought to say between agnosticism and

ecclesiasticism. For theology, the science, is one thing; and ecclesiasticism, the championship of a foregone conclusion * as to the truth of a particular form of theology, is another. With scientific theology, agnosticism has no quarrel. On the contrary, the agnostic, knowing too well the influence of prejudice and idiosyncrasy, even on those who desire most earnestly to be impartial, can wish for nothing more urgently than that the scientific theologian should not only be at perfect liberty to thrash out the matter in his own fashion, but that he should, if he can, find flaws in the agnostic position, and, even if demonstration is not to be had, that he should put, in their full force, the grounds of the conclusions he thinks probable. The scientific theologian admits the agnostic principle, however widely his results may differ from those reached by the majority of agnostics.

But, as between agnosticism and ecclesiasticism, or, as our neighbors across the Channel call it, clericalism, there can be neither peace nor truce. The cleric asserts that it is morally wrong not to believe certain propositions, whatever the results of a strict scientific investigation of the evidence of these propositions. He tells us that "religious error is, in itself, of an immoral nature." † He declares that he has prejudged certain conclusions, and looks upon those who show cause for arrest of judgment as emissaries of Satan. It necessarily follows that, for him, the attainment of faith, not the ascertainment of truth, is the highest aim of mental life. And, on careful analysis of the nature of this faith, it will too often be found to be not the mystic process of unity with the divine, understood by the religious enthusiast—but that which the candid simplicity of a Sunday scholar once defined it to be. "Faith," said this unconscious plagiarist of Tertullian, "is the power of saying you believe things which are incredible."

Now I, and many other agnostics, believe that faith, in this sense, is an abomination; and though we do not indulge in the luxury of self-righteousness so far as to call those who are not of our way of thinking hard names, we do feel that the disagreement between ourselves and those who hold this doctrine is even more moral than intellectual. It is desirable there should be an end of any mistakes on this topic. If our clerical opponents were clearly aware of the real state of the case, there would be an end of the curious delusion, which often appears between the lines of their writings, that those whom they are so fond of calling "infidels" are people who not only ought to be, but in their hearts are, ashamed of themselves. It would be discourteous to do more than hint the antipodal opposition of this pleasant dream of theirs to facts.

The clerics and their lay allies commonly tell us that, if we refuse to admit that there is good ground for expressing definite convictions about certain topics, the bonds of human society will dissolve and mankind lapse into savagery. There are several answers to this assertion. One is, that the bonds of human society were formed without the aid of their theology, and in the opinion of not a few competent judges have been weakened rather than strengthened by a good deal of it. Greek science, Greek art, the ethics of old Israel, the social organization of old Rome, contrived to come into being without the

* "Let us maintain, before we have proved. This seeming paradox is the secret of happiness." (Dr. Newman, "Tract 85," p. 85.)

† Dr. Newman, "Essay on Development," p. 357.

help of any one who believed in a single distinctive article of the simplest of the Christian creeds. The science, the art, the jurisprudence, the chief political and social theories of the modern world have grown out of those of Greece and Rome—not by favor of, but in the teeth of, the fundamental teachings of early Christianity, to which science, art, and any serious occupation with the things of this world were alike despicable.

Again, all that is best in the ethics of the modern world, in so far as it has not grown out of Greek thought or barbarian manhood, is the direct development of the ethics of old Israel. There is no code of legislation, ancient or modern, at once so just and so merciful, so tender to the weak and poor, as the Jewish law; and if the Gospels are to be trusted, Jesus of Nazareth himself declared that he taught nothing but that which lay implicitly, or explicitly, in the religious and ethical system of his people.

And the scribe said unto him, Of a truth, Teacher, thou hast well said that he is one; and there is none other but he: and to love him with all the heart, and with all the understanding, and with all the strength, and to love his neighbor as himself, is much more than all whole burnt-offerings and sacrifices. (Mark xii, 32, 33.)

Here is the briefest of summaries of the teaching of the prophets of Israel of the eighth century; does the Teacher, whose doctrine is thus set forth in his presence, repudiate the exposition? Nay, we are told, on the contrary, that Jesus saw that he "answered discreetly," and replied, "Thou art not far from the kingdom of God."

So that I think that even if the creeds, from the so-called "Apostles" to the so-called "Athanasian," were swept into oblivion; and even if the human race should arrive at the conclusion that whether a bishop washes a cup or leaves it unwashed, is not a matter of the least consequence, it will get on very well. The causes which have led to the development of morality in mankind, which have guided or impelled us all the way from the savage to the civilized state, will not cease to operate because a number of ecclesiastical hypotheses turn out to be baseless. And, even if the absurd notion that morality is more the child of speculation than of practical necessity and inherited instinct, had any foundation; if all the world is going to thieve, murder, and otherwise misconduct itself as soon as it discovers that certain portions of ancient history are mythical, what is the relevance of such arguments to any one who holds by the agnostic principle?

Surely the attempt to cast out Beelzebub by the aid of Beelzebub is a hopeful procedure as compared to that of preserving morality by the aid of immorality. For I suppose it is admitted that an agnostic may be perfectly sincere, may be competent, and may have studied the question at issue with as much care as his clerical opponents. But, if the agnostic really believes what he says, the "dreadful consequence" arguer (consistently I admit with his own principles) virtually asks him to abstain from telling the truth, or to say what he believes to be untrue, because of the supposed injurious consequences to morality. "Beloved brethren, that we may be spotlessly moral, before all things let us lie," is the sum total of many an exhortation addressed to the "infidel." Now, as I have already pointed out, we can not oblige our exhorters. We leave the practical application of the convenient doctrines of "reserve" and "non-natural interpretation" to those who invented them.

I trust that I have now made amends for my ambiguity, or want of

fullness, in any previous exposition of that which I hold to be the essence of the agnostic doctrine. Henceforward, I might hope to hear no more of the assertion that we are necessarily materialists, idealists, atheists, theists, or any other *ists*, if experience had led me to think that the proved falsity of a statement was any guarantee against its repetition. And those who appreciate the nature of our position will see, at once, that when ecclesiasticism declares that we ought to believe this, that, and the other, and are very wicked if we don't, it is impossible for us to give any answer but this: We have not the slightest objection to believe anything you like, if you will give us good grounds for belief; but, if you can not, we must respectfully refuse, even if that refusal should wreck morality and insure our own damnation several times over. We are quite content to leave that to the decision of the future. The course of the past has impressed us with the firm conviction that no good ever comes of falsehood, and we feel warranted in refusing even to experiment in that direction.

In the course of the present discussion it has been asserted that the "Sermon on the Mount" and the "Lord's Prayer" furnish a summary and condensed view of the essentials of the teaching of Jesus of Nazareth, set forth by himself. Now this supposed *Summa* of Nazarene theology distinctly affirms the existence of a spiritual world, of a heaven, and of a hell of fire; it teaches the fatherhood of God and the malignity of the devil; it declares the superintending providence of the former and our need of deliverance from the machinations of the latter; it affirms the fact of demoniac possession and the power of casting out devils by the faithful. And, from these premises, the conclusion is drawn that those agnostics who deny that there is any evidence of such a character as to justify certainty, respecting the existence and the nature of the spiritual world, contradict the express declarations of Jesus. I have replied to this argumentation by showing that there is strong reason to doubt the historical accuracy of the attribution to Jesus of either the "Sermon on the Mount" or the "Lord's Prayer"; and, therefore, that the conclusion in question is not warranted, at any rate on the grounds set forth.

But, whether the Gospels contain trustworthy statements about this and other alleged historical facts or not, it is quite certain that from them, taken together with the other books of the New Testament, we may collect a pretty complete exposition of that theory of the spiritual world which was held by both Nazarenes and Christians; and which was undoubtedly supposed by them to be fully sanctioned by Jesus, though it is just as clear that they did not imagine it contained any revelation by him of something heretofore unknown. If the pneumatological doctrine which pervades the whole New Testament is nowhere systematically stated, it is everywhere assumed. The writers of the Gospels and of the Acts take it for granted, as a matter of common knowledge; and it is easy to gather from these sources a series of propositions, which only need arrangement to form a complete system.

In this system, man is considered to be a duality formed of a spiritual element, the soul; and a corporeal* element, the body. And this duality is repeated in the universe, which consists of a corporeal world embraced and interpenetrated by a spiritual world.

*It is by no means to be assumed that "spiritual" and "corporeal" are exact equivalents of "immaterial" and "material" in the minds of ancient speculators on these topics.

The former consists of the earth, as its principal and central constituent, with the subsidiary sun, planets, and stars. Above the earth is the air, and below it the watery abyss. Whether the heaven, which is conceived to be above the air, and the hell in, or below, the subterranean deeps, are to be taken as corporeal or incorporeal is not clear.

However this may be, the heaven and the air, the earth and the abyss, are peopled by innumerable beings analogous in nature to the spiritual element in man, and these spirits are of two kinds, good and bad. The chief of the good spirits, infinitely superior to all the others, and their Creator as well as the Creator of the corporeal world and of the bad spirits, is God. His residence is heaven, where he is surrounded by the ordered hosts of good spirits; his angels, or messengers, and the executors of his will throughout the universe.

On the other hand, the chief of the bad spirits is Satan—the devil *par excellence*. He and his company of demons are free to roam through all parts of the universe, except heaven. These bad spirits are far superior to man in power and subtlety, and their whole energies are devoted to bringing physical and moral evils upon him, and to thwarting, so far as their power goes, the benevolent intentions of the Supreme Being. In fact, the souls and bodies of men form both the theatre and the prize of an incessant warfare between the good and the evil spirits—the powers of light and the powers of darkness. By leading Eve astray, Satan brought sin and death upon mankind. As the gods of the heathen, the demons are the founders and maintainers of idolatry; as the “powers of the air,” they afflict mankind with pestilence and famine; as “unclean spirits,” they cause disease of mind and body.

The significance of the appearance of Jesus, as the Messiah or Christ, is the reversal of the satanic work, by putting an end to both sin and death. He announces that the kingdom of God is at hand, when the “prince of this world” shall be finally “cast out” (John xii, 31) from the cosmos, as Jesus, during his earthly career, cast him out from individuals. Then will Satan and all his devilry, along with the wicked whom they have seduced to their destruction, be hurled into the abyss of unquenchable fire—there to endure continual torture, without a hope of winning pardon from the merciful God, their Father; or of moving the glorified Messiah to one more act of pitiful intercession; or even of interrupting, by a momentary sympathy with their wretchedness, the harmonious psalmody of their brother angels and men, eternally lapped in bliss unspeakable.

The strictest Protestant, who refuses to admit the existence of any source of divine truth, except the Bible, will not deny that every point of the pneumatological theory here set forth has ample scriptural warranty: the Gospels, the Acts, the Epistles, and the Apocalypse assert the existence of the devil and his demons and hell, as plainly as they do that of God and his angels and heaven. It is plain that the Messianic and the satanic conceptions of the writers of these books are the obverse and the reverse of the same intellectual coinage. If we turn from Scripture to the traditions of the fathers and the confessions of the churches, it will appear that in this one particular, at any rate, time has brought about no important deviation from primitive belief. From Justin onward, it may often be a fair question

whether God, or the devil, occupies a larger share of the attention of the fathers. It is the devil who instigates the Roman authorities to persecute; the gods and goddesses of paganism are devils, and idolatry itself is an invention of Satan; if a saint falls away from grace, it is by the seduction of the demon; if a heresy arises, the devil has suggested it; and some of the fathers* go so far as to challenge the pagans to a sort of exorcising match, by way of testing the truth of Christianity. Mediæval Christianity is at one with patristic, on this head. The masses, the clergy, the theologians, and the philosophers alike, live and move and have their being in a world full of demons, in which sorcery and possession are every-day occurrences. Nor did the Reformation make any difference. Whatever else Luther assailed, he left the traditional demonology untouched; nor could any one have entertained a more hearty and uncompromising belief in the devil, than he and, at a later period, the Calvinistic fanatics of New England did. Finally, in these last years of the nineteenth century, the demonological hypotheses of the first century are, explicitly or implicitly, held and occasionally acted upon, by the immense majority of Christians of all confessions.

Only here and there has the progress of scientific thought, outside the ecclesiastical world, so far affected Christians that they and their teachers fight shy of the demonology of their creed. They are fain to conceal their real disbelief in one half of Christian doctrine by judicious silence about it; or by flight to those refuges for the logically destitute, accommodation or allegory. But the faithful who fly to allegory in order to escape absurdity resemble nothing so much as the sheep in the fable who—to save their lives—jumped into the pit. The allegory pit is too commodious, is ready to swallow up so much more than one wants to put into it. If the story of the temptation is an allegory; if the early recognition of Jesus as the Son of God by the demon is an allegory; if the plain declaration of the writer of the first Epistle of John (iii, 8), "To this end was the Son of God manifested that he might destroy the works of the devil," is allegorical, then the Pauline version of the fall may be allegorical, and still more the words of consecration of the Eucharist, or the promise of the second coming; in fact, there is not a dogma of ecclesiastical Christianity the scriptural basis of which may not be whittled away by a similar process.

As to accommodation, let any honest man who can read the New Testament ask himself whether Jesus and his immediate friends and disciples can be dishonored more grossly than by the supposition that they said and did that which is attributed to them; while, in reality, they disbelieved in Satan and his demons, in possession and in exorcism?†

An eminent theologian has justly observed that we have no right to look at the propositions of the Christian faith with one eye open and the other shut. ("Tract 85," p. 29.) It really is not permissible to see with one eye, that Jesus is affirmed to declare the personality and the fatherhood of God, his loving providence, and his accessibility

* Tertullian ("Apolog. adv. Gentes," cap. xxiii) thus challenges the Roman authorities: let them bring a possessed person into the presence of a Christian before their tribunal; and, if the demon does not confess himself to be such, on the order of the Christian, let the Christian be executed out of hand.

† See the expression of orthodox opinion upon the "accommodation" subterfuge, already cited, p. 12.

to prayer, and to shut the other to the no less definite teaching ascribed to Jesus in regard to the personality and the misanthropy of the devil, his malignant watchfulness, and his subjection to exorcistic formulæ and rites. Jesus is made to say that the devil "was a murderer from the beginning" (John viii, 44) by the same authority as that upon which we depend for his asserted declaration that "God is a spirit" (John iv, 24).

To those who admit the authority of the famous Vincentian dictum that the doctrine which has been held "always, everywhere, and by all" is to be received as authoritative, the demonology must possess a higher sanction than any other Christian dogma, except, perhaps, those of the resurrection and of the Messiahship of Jesus; for it would be difficult to name any other points of doctrine on which the Nazarene does not differ from the Christian, and the different historical stages and contemporary subdivisions of Christianity from one another. And, if the demonology is accepted, there can be no reason for rejecting all those miracles in which demons play a part. The Gadarene story fits into the general scheme of Christianity, and the evidence for "Legion" and their doings is just as good as any other in the New Testament for the doctrine which the story illustrates.

It was with the purpose of bringing this great fact into prominence, of getting people to open both their eyes when they look at ecclesiasticism, that I devoted so much space to that miraculous story which happens to be one of the best types of its class. And I could not wish for a better justification of the course I have adopted than the fact that my heroically consistent adversary has declared his implicit belief in the Gadarene story and (by necessary consequence) in the Christian demonology as a whole. It must be obvious, by this time, that, if the account of the spiritual world given in the New Testament, professedly on the authority of Jesus, is true, then the demonological half of that account must be just as true as the other half. And, therefore, those who question the demonology, or try to explain it away, deny the truth of what Jesus said, and are, in ecclesiastical terminology, "infidels" just as much as those who deny the spirituality of God. This is as plain as anything can well be, and the dilemma for my opponent was either to assert that the Gadarene pig-bedevelopment actually occurred, or to write himself down an "infidel." As was to be expected, he chose the former alternative; and I may express my great satisfaction at finding that there is one spot of common ground on which both he and I stand. So far as I can judge, we are agreed to state one of the broad issues between the consequences of agnostic principles (as I draw them), and the consequences of ecclesiastical dogmatism (as he accepts it), as follows:

Ecclesiasticism says: The demonology of the Gospels is an essential part of that account of that spiritual world, the truth of which it declares to be certified by Jesus.

Agnosticism (*me judice*) says: There is no good evidence of the existence of a demonic spiritual world, and much reason for doubting it.

Hereupon the ecclesiastic may observe: Your doubt means that you disbelieve Jesus; therefore you are an "infidel" instead of an "agnostic." To which the agnostic may reply: No; for two reasons: first, because your evidence that Jesus said what you say he said is

worth very little; and, secondly, because a man may be an agnostic in the sense of admitting he has no positive knowledge; and yet consider that he has more or less probable ground for accepting any given hypothesis about the spiritual world. Just as a man may frankly declare that he has no means of knowing whether the planets generally are inhabited or not, and yet may think one of the two possible hypotheses more likely than the other, so he may admit that he has no means of knowing anything about the spiritual world, and yet may think one or other of the current views on the subject, to some extent, probable.

The second answer is so obviously valid that it needs no discussion. I draw attention to it simply in justice to those agnostics, who may attach greater value than I do to any sort of pneumatological speculations, and not because I wish to escape the responsibility of declaring that, whether Jesus sanctioned the demonological part of Christianity or not, I unhesitatingly reject it. The first answer, on the other hand, opens up the whole question of the claim of the biblical and other sources, from which hypotheses concerning the spiritual world are derived, to be regarded as unimpeachable historical evidence as to matters of fact.

Now, in respect of the trustworthiness of the Gospel narratives, I was anxious to get rid of the common assumption that the determination of the authorship and of the dates of these works is a matter of fundamental importance. That assumption is based upon the notion that what contemporary witnesses say must be true, or, at least, has always a *prima facie* claim to be so regarded; so that if the writers of any of the Gospels were contemporaries of the events (and still more if they were in the position of eye-witnesses) the miracles they narrate must be historically true, and, consequently, the demonology which they involve must be accepted. But the story of the "Translation of the blessed Martyrs Marcellinus and Petrus," and the other considerations (to which endless additions might have been made from the fathers and the mediæval writers) set forth in this review for March last, yield, in my judgment, satisfactory proof that, where the miraculous is concerned, neither considerable intellectual ability, nor undoubted honesty, nor knowledge of the world, nor proved faithfulness as civil historians, nor profound piety, on the part of eye-witnesses and contemporaries, affords any guarantee of the objective truth of their statements, when we know that a firm belief in the miraculous was ingrained in their minds, and was the pre-supposition of their observations and reasonings.

Therefore, although it be, as I believe, demonstrable that we have no real knowledge of the authorship, or of the date of composition of the Gospels, as they have come down to us, and that nothing better than more or less probable guesses can be arrived at on that subject, I have not cared to expend any space on the question. It will be admitted, I suppose, that the authors of the works attributed to Matthew, Mark, Luke, and John, whoever they may be, are personages whose capacity and judgment in the narration of ordinary events are not quite so well certified as those of Eginhard; and we have seen what the value of Eginhard's evidence is when the miraculous is in question.

I have been careful to explain that the arguments which I have used in the course of this discussion are not new; that they are his-

torical, and have nothing to do with what is commonly called science; and that they are all, to the best of my belief, to be found in the works of theologians of repute.

The position which I have taken up, that the evidence in favor of such miracles as those recorded by Eginhard, and consequently of mediæval demonology, is quite as good as that in favor of such miracles as the Gadarene, and consequently of Nazarene demonology, is none of my discovery. Its strength was, wittingly or unwittingly, suggested a century and a half ago by a theological scholar of eminence; and it has been, if not exactly occupied, yet so fortified with bastions and redoubts by a living ecclesiastical Vauban, that, in my judgment, it has been rendered impregnable. In the early part of the last century, the ecclesiastical mind in this country was much exercised by the question, not exactly of miracles, the occurrence of which in biblical times was axiomatic, but by the problem, When did miracles cease? Anglican divines were quite sure that no miracles had happened in their day, nor for some time past; they were equally sure that they happened sixteen or seventeen centuries earlier. And it was a vital question for them to determine at what point of time, between this *terminus a quo* and that *terminus ad quem*, miracles came to an end.

The Anglicans and the Romanists agreed in the assumption that the possession of the gift of miracle-working was *prima facie* evidence of the soundness of the faith of the miracle-workers. The supposition that miraculous powers might be wielded by heretics (though it might be supported by high authority) led to consequences too frightful to be entertained by people who were busied in building their dogmatic house on the sands of early church history. If, as the Romanists maintained, an unbroken series of genuine miracles adorned the records of their Church, throughout the whole of its existence, no Anglican could lightly venture to accuse them of doctrinal corruption. Hence, the Anglicans, who indulged in such accusations, were bound to prove the modern, the mediæval Roman, and the later patristic miracles false; and to shut off the wonder-working power from the Church at the exact point of time when Anglican doctrine ceased and Roman doctrine began. With a little adjustment—a squeeze here and a pull there—the Christianity of the first three or four centuries might be made to fit, or seem to fit, pretty well into the Anglican scheme. So the miracles, from Justin, say, to Jerome, might be recognized; while, in later times, the Church having become “corrupt”—that is to say, having pursued one and the same line of development further than was pleasing to Anglicans—its alleged miracles must needs be shams and impostures.

Under these circumstances, it may be imagined that the establishment of a scientific frontier, between the earlier realm of supposed fact and the later of asserted delusion, had its difficulties; and torrents of theological special pleading about the subject flowed from clerical pens; until that learned and acute Anglican divine, Conyers Middleton, in his “Free Inquiry,” tore the sophistical web they had laboriously woven to pieces, and demonstrated that the miracles of the patristic age, early and late, must stand or fall together, inasmuch as the evidence for the later is just as good as the evidence for the earlier wonders. If the one set are certified by contemporaneous witness of high repute, so are the other; and, in point of probability,

there is not a pin to choose between the two. That is the solid and irrefragable result of Middleton's contribution to the subject. But the Free Inquirer's freedom had its limits; and he draws a sharp line of demarkation between the patristic and the New Testament miracles—on the professed ground that the accounts of the latter, being inspired, are out of the reach of criticism.

A century later, the question was taken up by another divine, Middleton's equal in learning and acuteness, and far his superior in subtlety and dialectic skill; who, though an Anglican, scorned the name of Protestant; and, while yet a Churchman, made it his business to parade, with infinite skill, the utter hollowness of the arguments of those of his brother Churchmen who dreamed that they could be both Anglicans and Protestants. The argument of the "Essay on the Miracles recorded in the Ecclesiastical History of the Early Ages,"* by the present Roman cardinal, but then Anglican doctor, John Henry Newman, is compendiously stated by himself in the following passage:

If the miracles of church history can not be defended by the arguments of Leslie, Lyttleton, Paley, or Douglas, how many of the Scripture miracles satisfy their conditions? (p. cvii).

And, although the answer is not given in so many words, little doubt is left on the mind of the reader that in the mind of the writer it is: None. In fact, this conclusion is one which can not be resisted, if the argument in favor of the Scripture miracles is based upon that which laymen, whether lawyers, or men of science, or historians, or ordinary men of affairs call evidence. But there is something really impressive in the magnificent contempt with which, at times, Dr. Newman sweeps aside alike those who offer and those who demand such evidence.

Some infidel authors advise us to accept no miracles which would not have a verdict in their favor in a court of justice; that is, they employ against Scripture a weapon which Protestants would confine to attacks upon the Church, as if moral and religious questions required legal proofs, and evidence were the test of truth † (p. cvii).

"As if evidence were the test of truth"!—although the truth in question is the occurrence or non-occurrence of certain phenomena at a certain time and in a certain place. This sudden revelation of the great gulf fixed between the ecclesiastical and the scientific mind is enough to take away the breath of any one unfamiliar with the clerical organon. As if, one may retort, the assumption that miracles may, or have, served a moral or a religious end in any way alters the fact that they profess to be historical events, things that actually happened; and, as such, must needs be exactly those subjects about which evidence is appropriate and legal proofs (which are such merely because they afford adequate evidence) may be justly demanded. The Gadarene miracle either happened, or it did not. Whether the Gadarene "question" is moral or religious, or not, has nothing to do with the fact that it is a purely historical question whether the demons said what they are declared to have said, and the devil-possession pigs did or did not rush over the cliffs of the Lake of Gennesareth on a certain day of a certain year, after A. D. 26 and before A. D. 36; for, vague and uncertain as New Testament chronology is, I suppose it

* I quote the first edition (1843). A second edition appeared in 1870. Tract 85 of the "Tracts for the Times" should be read with this "Essay." If I were called upon to compile a primer of "infidelity," I think I should save myself trouble by making a selection from these works, and from the "Essay on Development" by the same author.

† Yet, when it suits his purpose, as in the introduction to the "Essay on Development," Dr. Newman can demand strict evidence in religious questions as sharply as any "infidel author"; and he can even profess to yield to its force ("Essays on Miracles," 1870, note, p. 391).

may be assumed that the event in question, if it happened at all, took place during the procuratorship of Pilate. If that is not the matter about which evidence ought to be required, and not only legal but strict scientific proof demanded by sane men who are asked to believe the story—what is? Is a reasonable being to be seriously asked to credit statements which, to put the case gently, are not exactly probable, and on the acceptance or rejection of which his whole view of life may depend, without asking for as much “legal” proof as would send an alleged pickpocket to jail, or as would suffice to prove the validity of a disputed will?

“Infidel authors” (if, as I am assured, I may answer for them) will decline to waste time on mere darkenings of counsel of this sort; but to those Anglicans who accept his premises, Dr. Newman is a truly formidable antagonist. What, indeed, are they to reply when he puts the very pertinent question:

“whether persons who, not merely question, but prejudge the ecclesiastical miracles on the ground of their want of resemblance, whatever that be, to those contained in Scripture—as if the Almighty could not do in the Christian church what he had not already done at the time of its foundation, or under the Mosaic covenant—whether such reasoners are not siding with the skeptic,”

and

“whether it is not a happy inconsistency by which they continue to believe the Scriptures while they reject the Church” (p. liii).

Again, I invite Anglican orthodoxy to consider this passage:

the narrative of the combats of St. Antony with evil spirits is a development rather than a contradiction of revelation, viz., of such texts as speak of Satan being cast out by prayer and fasting. To be shocked, then, at the miracles of ecclesiastical history, or to ridicule them for their strangeness, is no part of a scriptural philosophy (p. liii-llv).

Further on, Dr. Newman declares that it has been admitted

that a distinct line can be drawn in point of character and circumstance between the miracles of Scripture and of church history; but this is by no means the case (p. lv). . . . Specimens are not wanting in the history of the Church of miracles as awful in their character and as momentous in their effects as those which are recorded in Scripture. The fire interrupting the rebuilding of the Jewish Temple, and the death of Arius, are instances in ecclesiastical history of such solemn events. On the other hand, difficult instances in the Scripture history are such as these: the serpent in Eden, the ark, Jacob's vision for the multiplication of his cattle, the speaking of Balaam's ass, the axe swimming at Elisha's word, the miracle on the swine, and various instances of prayers or prophecies, in which, as in that of Noah's blessing and curse, words which seem the result of private feeling are expressly or virtually ascribed to a divine suggestion (p. lvi).

Who is to gainsay our ecclesiastical authority here? “Infidel authors” might be accused of a wish to ridicule the Scripture miracles by putting them on a level with the remarkable story about the fire which stopped the rebuilding of the Temple, or that about the death of Arius—but Dr. Newman is above suspicion. The pity is that his list of what he delicately terms “difficult” instances is so short. Why omit the manufacture of Eve out of Adam's rib, on the strict historical accuracy of which the chief argument of the defenders of an iniquitous portion of our present marriage law depends? Why leave out the account of the “Bene Elohim” and their gallantries, on which a large part of the worst practices of the mediæval inquisitors into witchcraft was based? Why forget the angel who wrestled with Jacob, and, as the account suggests, somewhat overstepped the bounds of fair play at the end of the struggle? Surely we must agree with Dr. Newman that, if all these camels have gone down, it savors of affectation to strain at such gnats as the sudden ailment of Arius in the midst of his deadly, if prayerful,† enemies; and the fiery explo-

* Compare “Tract 85,” p. 110: “I am persuaded that were men but consistent who oppose the Church doctrines as being unscriptural, they would vindicate the Jews for rejecting the gospel.”

† According to Dr. Newman, “This prayer [that of Bishop Alexander, who begged God to ‘take Arius away’] is said to have been offered about 3 P. M. on the Saturday; that same evening Arius was in the great square of Constantine, when he was suddenly seized with indisposition”

sion which stopped the Julian building operations. Though the words of the "Conclusion" of the "Essay on Miracles" may, perhaps, be quoted against me, I may express my satisfaction at finding myself in substantial accordance with a theologian above all suspicion of heterodoxy. With all my heart, I can declare my belief that there is just as good reason for believing in the miraculous slaying of the man who fell short of the Athanasian power of affirming contradictories, with respect to the nature of the Godhead, as there is for believing in the stories of the serpent and the ark told in Genesis, the speaking of Balaam's ass in Numbers, or the floating of the axe, at Elisha's order, in the second book of Kings.

It is one of the peculiarities of a really sound argument that it is susceptible of the fullest development; and that it sometimes leads to conclusions unexpected by those who employ it. To my mind it is impossible to refuse to follow Dr. Newman when he extends his reasoning from the miracles of the patristic and mediæval ages backward in time as far as miracles are recorded. But, if the rules of logic are valid, I feel compelled to extend the argument forward to the alleged Roman miracles of the present day, which Dr. Newman might not have admitted, but which Cardinal Newman may hardly reject. Beyond question, there is as good, or perhaps better, evidence for the miracles worked by our Lady of Lourdes, as there is for the floating of Elisha's axe or the speaking of Balaam's ass. But we must go still further; there is a modern system of thaumaturgy and demonology which is just as well certified as the ancient.* Veracious, excellent, sometimes learned and acute persons, even philosophers of no mean pretension, testify to the "levitation" of bodies much heavier than Elisha's axe; to the existence of "spirits" who, to the mere tactile sense, have been indistinguishable from flesh and blood, and occasionally have wrestled with all the vigor of Jacob's opponent; yet, further, to the speech, in the language of raps, of spiritual beings, whose discourses, in point of coherence and value, are far inferior to that of Balaam's humble but sagacious steed. I have not the smallest doubt that, if these were persecuting times, there is many a worthy "spiritualist" who would cheerfully go to the stake in support of his pneumatological faith, and furnish evidence, after Paley's own heart, in proof of the truth of his doctrines. Not a few modern divines, doubtless struck by the possibility of refusing the spiritual evidence, if the ecclesiastical evidence is accepted, and deprived of any *a priori* objec-

(p. clxx). The "infidel" Gibbon seems to have dared to suggest that "an option between poison and miracle" is presented by this case; and it must be admitted, that if the bishop had been within reach of a modern police magistrate, things might have gone hardly with him. Modern "infidels," possessed of a slight knowledge of chemistry, are not unlikely, with no less audacity, to suggest an "option between fire-damp and miracle" in seeking for the cause of the fiery outbreak at Jerusalem.

* A writer in a spiritualist journal takes me roundly to task for venturing to doubt the historical and literal truth of the Gadarene story. The following passage in his letter is worth quotation: "Now to the materialistic and scientific mind, to the uninitiated in spiritual verities, certainly this story of the Gadarene or Gergesene swine presents insurmountable difficulties; it seems grotesque and nonsensical. To the experienced, trained, and cultivated Spiritualist this miracle is, as I am prepared to show, one of the most instructive, the most profoundly useful, and the most beneficent which Jesus ever wrought in the whole course of his pilgrimage of redemption on earth." Just so. And the first page of this same journal presents the following advertisement, among others of the same kidney:

"TO WEALTHY SPIRITUALISTS.—A lady medium of tried power wishes to meet with an elderly gentleman who would be willing to give her a comfortable home and maintenance in exchange for her spiritualistic services, as her guides consider her health is too delicate for public sittings; London preferred.—Address 'Mary,' office of 'Light.'"

Are we going back to the days of the Judges, when wealthy Micah set up his private ephod, teraphim, and Levite?

tion by their implicit belief in Christian demonology, show themselves ready to take poor Sludge seriously, and to believe that he is possessed by other devils than those of need, greed, and vainglory.

Under these circumstances, it was to be expected, though it is none the less interesting to note the fact, that the arguments of the latest school of "spiritualists" present a wonderful family likeness to those which adorn the subtle disquisitions of the advocate of ecclesiastical miracles of forty years ago. It is unfortunate for the "spiritualists" that, over and over again, celebrated and trusted media, who really, in some respects, call to mind the Montanist* and gnostic seers of the second century, are either proved in courts of law to be fraudulent impostors; or, in sheer weariness, as it would seem, of the honest dupes who swear by them, spontaneously confess their long-continued iniquities, as the Fox women did the other day in New York.† But whenever a catastrophe of this kind takes place, the believers are nowise dismayed by it. They freely admit that not only the media, but the spirits whom they summon, are sadly apt to lose sight of the elementary principles of right and wrong; and they triumphantly ask: How does the occurrence of occasional impostures disprove the genuine manifestations (that is to say, all those which have not yet been proved to be impostures or delusions)? And, in this, they unconsciously plagiarize from the churchman, who just as freely admits that many ecclesiastical miracles may have been forged; and asks, with the same calm contempt, not only of legal proofs, but of common-sense probability, Why does it follow that none are to be supposed genuine? I must say, however, that the spiritualists, so far as I know, do not venture to outrage right reason so boldly as the ecclesiastics. They do not sneer at "evidence"; nor repudiate the requirement of legal proofs. In fact, there can be no doubt that the spiritualists produce better evidence for their manifestations than can be shown either for the miraculous death of Arius, or for the invention of the cross.‡

From the "levitation" of the axe at one end of a period of near three thousand years to the "levitation" of Sludge & Co. at the other end, there is a complete continuity of the miraculous with every gradation from the childish to the stupendous, from the gratification of a caprice to the illustration of sublime truth. There is no drawing a line in the series that might be set out of plausibly attested cases of spiritual intervention. If one is true, all may be true; if one is false, all may be false.

This is to my mind, the inevitable result of that method of reasoning which is applied to the confutation of Protestantism, with so much success, by one of the acutest and subtlest disputants who have

* Consider Tertullian's "sister" ("hodie apud nos"), who conversed with angels, saw and heard mysteries, knew men's thoughts, and prescribed medicine for their bodies ("De Anima," chap. 9). Tertullian tells us that this woman saw the soul as corporeal, and described its color and shape. The "infidel" will probably be unable to refrain from insulting the memory of the ecstatic saint by the remark that Tertullian's known views about the corporeality of the soul may have had something to do with the remarkable perceptive powers of the Montanist medium, in whose revelations of the spiritual world he took such profound interest.

† See the New York "World" for Sunday, October 21, 1888; and the "Report of the Seybert Commission," Philadelphia, 1887.

‡ Dr. Newman's observation that the miraculous multiplication of the pieces of the true cross (with which "the whole world is filled," according to Cyril of Jerusalem; and of which some say there are enough extant to build a man-of-war) is no more wonderful than that of the loaves and fishes, is one that I do not see my way to contradict. See "Essay on Miracles," second edition, p. 168.

ever championed ecclesiasticism—and one can not put his claims to acuteness and subtlety higher.

... the Christianity of history is not Protestantism. If ever there were a safe truth it is this. . . . "To be deep in history is to cease to be a Protestant." *

I have not a shadow of doubt that these anti-Protestant epigrams are profoundly true. But I have as little that, in the same sense, the "Christianity of history is not" Romanism; and that to be deeper in history is to cease to be a Romanist. The reasons which compel my doubts about the compatibility of the Roman doctrine, or any other form of Catholicism, with history, arise out of exactly the same line of argument as that adopted by Dr. Newman in the famous essay which I have just cited. If, with one hand, Dr. Newman has destroyed Protestantism, he has annihilated Romanism with the other; and the total result of his ambidextral efforts is to shake Christianity to its foundations. Nor was any one better aware that this must be the inevitable result of his arguments—if the world should refuse to accept Roman doctrines and Roman miracles—than the writer of "Tract 85."

Dr. Newman made his choice and passed over to the Roman Church half a century ago. Some of those who were essentially in harmony with his views preceded, and many followed him. But many remained; and, as the quondam Puseyite and present Ritualistic party, they are continuing that work of sapping and mining the Protestantism of the Anglican Church which he and his friends so ably commenced. At the present time they have no little claim to be considered victorious all along the line. I am old enough to recollect the small beginnings of the Tractarian party; and I am amazed when I consider the present position of their heirs. Their little leaven has leavened, if not the whole, yet a very large, lump of the Anglican Church; which is now pretty much of a preparatory school for Papistry. So that it really behooves Englishmen (who, as I have been informed by high authority, are all, legally, members of the state Church, if they profess to belong to no other sect) to wake up to what that powerful organization is about, and whither it is tending. On this point, the writings of Dr. Newman, while he still remained within the Anglican fold, are a vast store of the best and the most authoritative information. His doctrines on ecclesiastical miracles and on development are the corner-stones of the Tractarian fabric. He believed that his arguments led either Romeward, or to what ecclesiastics call "infidelity," and I call agnosticism. I believe that he was quite right in this conviction; but while he chooses the one alternative, I choose the other; as he rejects Protestantism on the ground of its incompatibility with history, so, *a fortiori*, I conceive that Romanism ought to be rejected, and that an impartial consideration of the evidence must refuse the authority of Jesus to anything more than the Nazarenism of James and Peter and John. And let it not be supposed that this is a mere "infidel" perversion of the facts. No one has more openly and clearly admitted the possibility that they may be fairly interpreted in this way than Dr. Newman. If, he says, these are texts which seem to show that Jesus contemplated the evangelization of the heathen:

* "An Essay on the Development of Christian Doctrine," by J. H. Newman, D. D., pp. 7 and 3, (1878.)

... Did not the apostles hear our Lord? and what was *their* impression from what they heard? Is it not certain that the apostles did not gather this truth from his teaching? ("Tract 85," p. 63.) He said, "Preach the gospel to every creature." These words *need* have only meant "Bring all men to Christianity through Judaism." Make them Jews, that they may enjoy Christ's privileges which are lodged in Judaism; teach them those rites and ceremonies, circumcision and the like, which hitherto have been dead ordinances, and now are living; and so the apostles seem to have understood them (*Ibid.*, p. 65).

So far as Nazarenism differentiated itself from contemporary orthodox Judaism, it seems to have tended toward a revival of the ethical and religious spirit of the prophetic age, accompanied by the belief in Jesus as the Messiah, and by various accretions which had grown round Judaism subsequently to the exile. To these belong the doctrines of the resurrection, of the last judgment of heaven and hell; of the hierarchy of good angels; of Satan and the hierarchy of evil spirits. And there is very strong ground for believing that all these doctrines, at least in the shapes in which they were held by the post-exilic Jews, were derived from Persian and Babylonian * sources, and are essentially of heathen origin.

How far Jesus positively sanctioned all these indrainings of circum-jacent paganism into Judaism; how far any one has a right to say that the refusal to accept one or other of these doctrines as ascertained verities comes to the same thing as contradicting Jesus, it appears to me not easy to say. But it is hardly less difficult to conceive that he could have distinctly negatived any of them; and, more especially, that demonology which has been accepted by the Christian churches in every age and under all their mutual antagonisms. But, I repeat my conviction that, whether Jesus sanctioned the demonology of his time and nation or not, it is doomed. The future of Christianity as a dogmatic system and apart from the old Israelitish ethics which it has appropriated and developed, lies in the answer which mankind will eventually give to the question whether they are prepared to believe such stories as the Gadarene and the pneumatological hypotheses which go with it, or not. My belief is they will decline to do anything of the sort, whenever and wherever their minds have been disciplined by science. And that discipline must and will at once follow and lead the footsteps of advancing civilization.

The preceding pages were written before I became acquainted with the contents of the May number of this review, wherein I discover many things which are decidedly not to my advantage. It would appear that "evasion" is my chief resource "incapacity for strict argument" and "rotteness of ratiocination" my main mental characteristics, and that it is "barely credible" that a statement which I profess to make of my own knowledge is true. All which things I notice, merely to illustrate the great truth, forced on me by long experience, that it is only from those who enjoy the blessing of a firm hold of the Christian faith that such manifestations of meekness, patience, and charity are to be expected.

I had imagined that no one who had read my preceding papers could entertain a doubt as to my position in respect of the main issue as it has been stated and restated by my opponent:

an agnosticism which knows nothing of the relation of man to God must not only refuse belief to our Lord's most undoubted teaching, but must deny the reality of the spiritual convictions in which he lived and died.†

* Dr Newman faces this question with his customary ability. "Now, I own, I am not at all solicitous to deny that this doctrine of an apostate angel and his hosts was gained from Babylon: it might still be divine nevertheless. God who made the prophet's ass speak, and thereby instructed the prophet, might instruct his church by means of heathen Babylon" ("Tract 85," p. 88). There seems to be no end to the apologetic burden that Balaam's ass can carry.

† Page 66.

That is said to be "the simple question which is at issue between us," and the three testimonies to that teaching and those convictions selected are the Sermon on the Mount, the Lord's Prayer, and the Story of the Passion.

My answer, reduced to its briefest form, has been: In the first place, the evidence is such that the exact nature of the teachings and the convictions of Jesus is extremely uncertain, so that what ecclesiastics are pleased to call a denial of them may be nothing of the kind. And, in the second place, if Jesus taught the demonological system involved in the Gadarene story—if a belief in that system formed a part of the spiritual convictions in which he lived and died—then I, for my part, unhesitatingly refuse belief in that teaching, and deny the reality of those spiritual convictions. And I go further and add, that exactly in so far as it can be proved that Jesus sanctioned the essentially pagan demonological theories current among the Jews of his age, exactly in so far, for me, will his authority in any matter touching the spiritual world be weakened.

With respect to the first half of my answer, I have pointed out that the Sermon on the Mount, as given in the first Gospel, is, in the opinion of the best critics, a "mosaic work" of materials derived from different sources, and I do not understand that this statement is challenged. The only other Gospel, the third, which contains something like it, makes not only the discourse, but the circumstances under which it was delivered, very different. Now, it is one thing to say that there was something real at the bottom of the two discourses—which is quite possible; and another to affirm that we have any right to say what that something was, or to fix upon any particular phrase and declare it to be a genuine utterance. Those who pursue theology as a science, and bring to the study an adequate knowledge of the ways of ancient historians, will find no difficulty in providing illustrations of my meaning. I may supply one which has come within range of my own limited vision.

In Josephus's "History of the Wars of the Jews" (chap. xix) that writer reports a speech which he says Herod made at the opening of a war with the Arabians. It is in the first person, and would naturally be supposed by the reader to be intended for a true version of what Herod said. In the "Antiquities," written some seventeen years later, the same writer gives another report, also in the first person, of Herod's speech on the same occasion. This second oration is twice as long as the first, and though the general tenor of the two speeches is pretty much the same, there is hardly any verbal identity, and a good deal of matter is introduced into the one which is absent from the other. Now Josephus prides himself on his accuracy; people whose fathers might have heard Herod's oration were his contemporaries; and yet his historical sense is so curiously undeveloped, that he can, quite innocently, perpetuate an obvious literary fabrication; for one of the two accounts must be incorrect. Now, if I am asked whether I believe that Herod made some particular statement on this occasion; whether, for example, he uttered the pious aphorism, "Where God is, there is both multitude and courage," which is given in the "Antiquities," but not in the "Wars," I am compelled to say I do not know. One of the two reports must be erroneous, possibly both are: at any rate, I can not tell how much of either is true. And, if some fervent admirer of the Idumean should build up a theory of Herod's piety

upon Josephus's evidence that he propounded the aphorism, is it a "mere evasion" to say, in reply, that the evidence that he did utter it is worthless?

It appears again that, adopting the tactics of Conachar when brought face to face with Hal o' the Wynd, I have been trying to get my simple-minded adversary to follow me on a wild-goose chase through the early history of Christianity, in the hope of escaping impending defeat on the main issue. But I may be permitted to point out that there is an alternative hypothesis which equally fits the facts; and that, after all, there may have been method in the madness of my supposed panic.

For suppose it to be established that Gentile Christianity was a totally different thing from the Nazarenism of Jesus and his immediate disciples; suppose it to be demonstrable that, as early as the sixth decade of our era at least, there were violent divergencies of opinion among the followers of Jesus; suppose it to be hardly doubtful that the Gospels and the Acts took their present shapes under the influence of these divergencies; suppose that their authors, and those through whose hands they passed, had notions of historical veracity not more eccentric than those which Josephus occasionally displays—surely the chances that the Gospels are altogether trustworthy records of the teachings of Jesus become very slender. And as the whole of the case of the other side is based on the supposition that they are accurate records (especially of speeches, about which ancient historians are so curiously loose), I really do venture to submit that this part of my argument bears very seriously on the main issue; and, as ratiocination, is sound to the core.

Again, when I passed by the topic of the speeches of Jesus on the cross, it appears that I could have had no other motive than the dictates of my native evasiveness. An ecclesiastical dignitary may have respectable reasons for declining a fencing-match "in sight of Gethsemane and Calvary"; but an ecclesiastical "infidel"! Never. It is obviously impossible that, in the belief that "the greater includes the less," I, having declared the Gospel evidence in general, as to the sayings of Jesus, to be of questionable value, thought it needless to select, for illustration of my views, those particular instances which were likely to be most offensive to persons of another way of thinking. But any supposition that may have been entertained that the old familiar tones of the ecclesiastical war-drum will tempt me to engage in such needless discussion had better be renounced. I shall do nothing of the kind. Let it suffice that I ask my readers to turn to the twenty-third chapter of Luke (revised version), verse thirty-four, and he will find in the margin

Some ancient authorities omit: And Jesus said, "Father, forgive them, for they know not what they do."

So that, even as late as the fourth century, there were ancient authorities, indeed some of the most ancient and weightiest, who either did not know of this utterance, so often quoted as characteristic of Jesus, or did not believe it had been uttered.

Many years ago, I received an anonymous letter, which abused me heartily for my want of moral courage in not speaking out. I thought that one of the oddest charges an anonymous letter-writer could bring. But I am not sure that the plentiful sowing of the pages of the article with which I am dealing with accusations of evasion,

may not seem odder to those who consider that the main strength of the answers with which I have been favored (in this review and elsewhere) is devoted not to anything in the text of my first paper, but to a note which occurs at page 171.* In this I say:

Dr. Wace tells us: "It may be asked how far we can rely on the accounts we possess of our Lord's teaching on these subjects." And he seems to think the question appropriately answered by the assertion that it "ought to be regarded as settled by M. Renan's practical surrender of the adverse case."

I requested Dr. Wace to point out the passages of M. Renan's works, in which, as he affirms, this "practical surrender" (not merely as to the age and authorship of the Gospels, be it observed, but as to their historical value) is made, and he has been so good as to do so. Now let us consider the parts of Dr. Wace's citation from Renan which are relevant to the issue:

The author of this Gospel [Luke] is certainly the same as the author of the Acts of the Apostles. Now the author of the Acts seems to be a companion of St. Paul—a character which accords completely with St. Luke. I know that more than one objection may be opposed to this reasoning; but one thing, at all events, is beyond doubt, namely, that the author of the third Gospel and of the Acts is a man who belonged to the second apostolic generation; and this suffices for our purpose.

This is a curious "practical surrender of the adverse case." M. Renan thinks that there is no doubt that the author of the third Gospel is the author of the Acts—a conclusion in which I suppose critics generally agree. He goes on to remark that this person *seems* to be a companion of St. Paul, and adds that Luke was a companion of St. Paul. Then, somewhat needlessly, M. Renan points out that there is more than one objection to jumping, from such data as these, to the conclusion that "Luke" is the writer of the third Gospel. And, finally, M. Renan is content to reduce that which is "beyond doubt" to the fact that the author of the two books is a man of the second apostolic generation. Well, it seems to me that I could agree with all that M. Renan considers "beyond doubt" here, without surrendering anything, either "practically" or theoretically.

Dr. Wace ("Nineteenth Century," March, p. 363)† states that he derives the above citation from the preface of the fifteenth edition of the "Vie de Jésus." My copy of "Les Évangiles," dated 1877, contains a list of Renan's "Œuvres Complètes," at the head of which I find "Vie de Jésus," 15^e édition. It is, therefore, a later work than the edition of the "Vie de Jésus" which Dr. Wace quotes. Now "Les Évangiles," as its name implies, treats fully of the questions respecting the date and authorship of the Gospels; and any one who desired, not merely to use M. Renan's expressions for controversial purposes, but to give a fair account of his views in their full significance, would, I think, refer to the later source.

If this course had been taken, Dr. Wace might have found some as decided expressions of opinion in favor of Luke's authorship of the third Gospel as he has discovered in "The Apostles." I mention this circumstance because I desire to point out that, taking even the strongest of Renan's statements, I am still at a loss to see how it justifies that large-sounding phrase "practical surrender of the adverse case." For, on p. 438 of "Les Évangiles," Renan speaks of the way in which Luke's "excellent intentions" have led him to torture history in the Acts; he declares Luke to be the founder of that "eternal fiction which is called ecclesiastical history"; and, on the preceding page, he talks of the "myth" of the Ascension—with its *mise en scène voulue*. At p.

* Page 10

† Page 40.

435, I find "Luc, ou l'auteur quel qu'il soit du troisième Evangile" [Luke, or whoever may be the author of the third Gospel]; at p. 280, the accounts of the Passion, the death and the resurrection of Jesus are said to be "peu historiques" [little historical]; at p. 283, "La valeur historique du troisième Evangile est sûrement moindre que celles des deux premiers" [the historical value of the third Gospel is surely less than that of the first two].

A Pyrrhic sort of victory for orthodoxy this "surrender"! And, all the while, the scientific student of theology knows that the more reason there may be to believe that Luke was the companion of Paul, the more doubtful becomes his credibility, if he really wrote the Acts. For, in that case, he could not fail to have been acquainted with Paul's account of the Jerusalem conference, and he must have consciously misrepresented it. We may next turn to the essential part of Dr. Wace's citation ("Nineteenth Century," p. 365)* touching the first Gospel:

St. Matthew evidently deserves peculiar confidence for the discourses. Here are "the oracles"—the very notes taken while the memory of the instruction of Jesus was living and definite.

M. Renan here expresses the very general opinion as to the existence of a collection of "logia," having a different origin from the text in which they are imbedded, in Matthew. "Notes" are somewhat suggestive of a shorthand writer, but the suggestion is unintentional, for M. Renan assumes that these "notes" were taken, not at the time of the delivery of the "logia," but subsequently, while (as he assumes) the memory of them was living and definite; so that, in this very citation, M. Renan leaves open the question of the general historical value of the first Gospel, while it is obvious that the accuracy of "notes," taken, not at the time of delivery, but from memory, is a matter about which more than one opinion may be fairly held. Moreover, Renan expressly calls attention to the difficulty of distinguishing the authentic "logia" from later additions of the same kind ("Les Evangiles," p. 201). The fact is, there is no contradiction here to that opinion about the first Gospel which is expressed in "Les Evangiles" (p. 175.)

The text of the so-called Matthew supposes the pre-existence of that of Mark, and does little more than complete it. He completes it in two fashions—first, by the insertion of those long discourses which gave their chief value to the Hebrew Gospels; then by adding traditions of a more modern formation, results of successive developments of the legend, and to which the Christian consciousness already attached infinite value.

M. Renan goes on to suggest that besides "Mark," "pseudo-Matthew" used an Aramaic version of the Gospel originally set forth in that dialect. Finally, as to the second Gospel ("Nineteenth Century," p. 365):†

He [Mark] is full of minute observations, proceeding, beyond doubt, from an eye-witness. There is nothing to conflict with the supposition that this eye-witness . . . was the apostle Peter himself, as Papias has it.

Let us consider this citation also by the light of "Les Evangiles":

This work, although composed after the death of Peter, was, in a sense, the work of Peter; it represents the way in which Peter was accustomed to relate the life of Jesus (p. 116).

M. Renan goes on to say that, as an historical document, the Gospel of Mark has a great superiority (p. 116), but Mark has a motive for omitting the discourses; and he attaches a "puerile importance" to miracles (p. 117). The Gospel of Mark is less a legend than a biography written with credulity (p. 118). It would be rash to

* Page 41.

† Page 42.

say that Mark has not been interpolated and retouched (p. 120).

If any one thinks that I have not been warranted in drawing a sharp distinction between "scientific theologians" and "counsel for creeds"; or that my warning against the too ready acceptance of certain declarations as to the state of biblical criticism was needless; or that my anxiety as to the sense of the word "practical" was superfluous, let him compare the statement that M. Renan has made a "practical surrender of the adverse case" with the facts just set forth. For what is the adverse case? The question, as Dr. Wace puts it, is, "It may be asked how far can we rely on the accounts we possess of our Lord's teaching on these subjects." It will be obvious that M. Renan's statements amount to an adverse answer—to a "practical" denial that any great reliance can be placed on these accounts. He does not believe that Matthew, the apostle, wrote the first Gospel; he does not profess to know who is responsible for the collection of "logia," or how many of them are authentic; though he calls the second Gospel the most historical, he points out that it is written with credulity, and may have been interpolated and retouched; and as to the author "quel qu'il soit" of the third Gospel, who is to "rely on the accounts" of a writer who deserves the cavalier treatment which "Luke" meets with at M. Renan's hands?

I repeat what I have already more than once said, that the question of the age and the authorship of the Gospels has not, in my judgment, the importance which is so commonly assigned to it; for the simple reason that the reports, even of eye-witnesses, would not suffice to justify belief in a large and essential part of their contents; on the contrary, these reports would discredit the witnesses. The Gadarene miracle, for example, is so extremely improbable, that the fact of its being reported by three, even independent, authorities could not justify belief in it unless we had the clearest evidence as to their capacity as observers and as interpreters of their observations. But it is evident that the three authorities are not independent; that they have simply adopted a legend, of which there were two versions; and instead of their proving its truth, it suggests their superstitious credulity; so that, if "Matthew," "Mark," and "Luke" are really responsible for the Gospels, it is not the better for the Gadarene story, but the worse for them.

A wonderful amount of controversial capital has been made out of my assertion in the note to which I have referred, as an *obiter dictum* of no consequence to my argument, that, if Renan's work* were non-extant, the main results of biblical criticism as set forth in the works of Strauss, Baur, Reuss, and Volkmar, for example, would not be sensibly affected. I thought I had explained it satisfactorily already, but it seems that my explanation has only exhibited still more of my native perversity, so I ask for one more chance.

In the course of the historical development of any branch of science, what is universally observed is this: that the men who make epochs and are the real architects of the fabric of exact knowledge are those who introduce fruitful ideas or methods. As a rule, the man who does this pushes his idea or his method too far; or, if he does not, his school is sure to do so, and those who follow have to reduce his work to its proper value, and assign it its place in the whole. Not unfre-

* I trust it may not be supposed that I undervalue M. Renan's labors or intended to speak slightingly of them.

quently they, in their turn, overdo the critical process, and, in trying to eliminate errors, throw away truth.

Thus, as I said, Linnæus, Buffon, Cuvier, Lamarck, really "set forth the results" of a developing science, although they often heartily contradict one another. Notwithstanding this circumstance, modern classificatory method and nomenclature have largely grown out of the results of the work of Linnæus; the modern conception of biology, as a science, and of its relation to climatology, geography, and geology, are as largely rooted in the results of the labors of Buffon; comparative anatomy and paleontology owe a vast debt to Cuvier's results; while invertebrate zoölogy and the revival of the idea of evolution are intimately dependent on the results of the work of Lamarck. In other words, the main results of biology up to the early years of this century are to be found in, or spring out of, the works of these men.

So, if I mistake not, Strauss, if he did not originate the idea of taking the mythopœic faculty into account in the development of the Gospel narratives; and, though he may have exaggerated the influence of that faculty, obliged scientific theology hereafter to take that element into serious consideration; so Baur, in giving prominence to the cardinal fact of the divergence of the Nazarene and Pauline tendencies in the primitive Church; so Reuss, in setting a marvelous example of the cool and dispassionate application of the principles of scientific criticism over the whole field of Scripture; so Volkmar, in his clear and forcible statement of the Nazarene limitations of Jesus, contributed results of permanent value in scientific theology. I took these names as they occurred to me. Undoubtedly, I might have advantageously added to them; perhaps I might have made a better selection. But it really is absurd to try to make out that I did not know that these writers widely disagree; and I believe that no scientific theologian will deny that, in principle, what I have said is perfectly correct. Ecclesiastical advocates, of course, can not be expected to take this view of the matter. To them, these mere seekers after truth, in so far as their results are unfavorable to the creed the clerics have to support, are more or less "infidels," or favorers of "infidelity"; and the only thing they care to see, or probably can see, is the fact that, in a great many matters, the truth-seekers differ from one another, and therefore can easily be exhibited to the public, as if they did nothing else; as if any one who referred to them, as having each and all contributed his share to the results of theological science, was merely showing his ignorance; and, as if a charge of inconsistency could be based on the fact that he himself often disagrees with what they say. I have never lent a shadow of foundation to the assumption that I am a follower of either Strauss, or Baur, or Reuss, or Volkmar, or Renan; my debt to these eminent men—so far my superiors in theological knowledge—is, indeed, great; yet it is not for their opinions, but for those I have been able to form for myself, by their help.

In "Agnosticism: a rejoinder" (p. 49) I have referred to the difficulties under which those professors of the science of theology, whose tenure of their posts depends on the results of their investigations, must labor; and, in a note, I add:

Imagine that all our chairs of astronomy had been founded in the fourteenth century, and that their incumbents were bound to sign Ptolemaic articles. In that case, with every respect for the efforts of persons thus hampered to attain and expound the truth, I think men of common sense would go elsewhere to learn astronomy.

I did not write this paragraph without a knowledge that its sense would be open to the kind of perversion which it has suffered; but, if that was clear, the necessity for the statement was still clearer. It is my deliberate opinion: I reiterate it; and I say that, in my judgment, it is extremely inexpedient that any subject which calls itself a science should be intrusted to teachers who are debarred from freely following out scientific methods to their legitimate conclusions, whatever those conclusions may be. If I may borrow a phrase paraded at the Church Congress, I think it "ought to be unpleasant" for any man of science to find himself in the position of such a teacher.

Human nature is not altered by seating it in a professional chair, even of theology. I have very little doubt that if, in the year 1859, the tenure of my office had depended upon my adherence to the doctrines of Cuvier, the objections to those set forth in the "*Origin of Species*" would have had a halo of gravity about them that, being free to teach what I pleased, I failed to discover. And, in making that statement, it does not appear to me that I am confessing, that I should have been debarred by "selfish interests" from making candid inquiry, or that I should have been biased by "sordid motives." I hope that even such a fragment of moral sense as may remain in an ecclesiastical "infidel" might have got me through the difficulty; but it would be unworthy to deny or disguise the fact that a very serious difficulty must have been created for me by the nature of my tenure. And let it be observed that the temptation, in my case, would have been far slighter than in that of a professor of theology; whatever biological doctrine I had repudiated, nobody I cared for would have thought the worse of me for so doing. No scientific journals would have howled me down, as the religious newspapers howled down my too honest friend, the late Bishop of Natal; nor would my colleagues in the Royal Society have turned their backs upon me, as his episcopal colleagues boycotted him.

I say these facts are obvious, and that it is wholesome and needful that they should be stated. It is in the interests of theology, if it be a science, and it is in the interests of those teachers of theology who desire to be something better than counsel for creeds, that it should be taken to heart. The seeker after theological truth, and that only, will no more suppose that I have insulted him than the prisoner who works in fetters will try to pick a quarrel with me, if I suggest that he would get on better if the fetters were knocked off; unless, indeed, as it is said does happen in the course of long captivities, that the victim at length ceases to feel the weight of his chains or even takes to hugging them, as if they were honorable ornaments.*

* To-Day's "*Times*" contains a report of a remarkable speech by Prince Bismarck, in which he tells the Reichstag that he has long given up investing in foreign stock, lest so doing should mislead his judgment in his transactions with foreign states. Does this declaration prove that the chancellor accuses himself of being "sordid" and "selfish," or does it not rather show that, even in dealing with himself, he remains the man of realities?

X.

"COWARDLY AGNOSTICISM."*

A WORD WITH PROFESSOR HUXLEY.

By W. H. MALLOCK.

I WELCOME the discussion which, in this review and elsewhere, has been lately revived in earnest as to the issue between positive science and theology. I especially welcome Prof. Huxley's recent contribution to it, to which presently I propose to refer in detail. In that contribution—an article with the title "Agnosticism," which appeared a month or two since in "The Nineteenth Century"—I shall point out things which will probably startle the public, the author himself included, in case he cares to attend to them.

Before going further, however, let me ask and answer this question. If Prof. Huxley should tell us that he does not believe in God, why should we think the statement, as coming from him, worthy of an attention which we certainly should not give it if made by a person less distinguished than himself? The answer to this question is as follows: We should think Prof. Huxley's statement worth considering for two reasons: Firstly, he speaks as a man pre-eminently well acquainted with certain classes of facts. Secondly, he speaks as a man eminent, if not pre-eminent, for the vigor and honesty with which he has faced these facts, and drawn certain conclusions from them. Accordingly, when he sums up for us the main conclusions of science, he speaks not in his own name, but in the name of the physical universe, as modern science has thus far apprehended it; and similarly, when from these conclusions he reasons about religion, the bulk of the arguments which he advances against theology are in no way peculiar to himself, or gain any of their strength from his reputation; they are virtually the arguments of the whole non-Christian world. He may possibly have, on some points, views peculiar to himself. He may also have certain peculiar ways of stating them. But it requires no great critical acuteness, it requires only ordinary fairness, to separate those of his utterances which represent facts generally accepted, and arguments generally influential, from those which represent only some peculiarity of his own. Now, all this is true not of Prof. Huxley only. With various qualifications, it is equally true of writers with whom Prof. Huxley is apparently in constant antagonism, and who also exhibit constant antagonism among themselves. I am at this moment thinking of two especially—Mr. Frederic Harrison and Mr. Herbert Spencer. Mr. Harrison, in his capacity of religious teacher, is constantly attacking both Mr. Spencer and Prof. Huxley. Prof. Huxley repays Mr. Harrison's blows with interest; and there are certain questions of a religious and practical character as to which he and Mr. Spencer would be hardly on better terms. But, underneath the several questions they quarrel about, there is a solid substructure of conclusions, methods, and arguments, as to which they all agree—agree in the

* "The Bishop of Peterborough departed so far from his customary courtesy and self-respect as to speak of 'cowardly agnosticism.'"—PROF. HUXLEY, *loc. cit.*

most absolute way. What this agreement consists in, and what practical bearing, if taken by itself, it must have on our views of life, I shall now try to explain in a brief and unquestionable summary; and in that summary, what the reader will have before him is not the private opinion of these eminent men, but ascertained facts with regard to man and the universe; and the conclusions which, if we have nothing else to assist us, are necessarily drawn from those facts by the necessary operations of the mind. The mention of names, however, has this signal convenience—it will keep the reader convinced that I am not speaking at random, and will supply him with standards by which he can easily test the accuracy and the sufficiency of my assertions.

The case, then, of science, or modern thought, against theological religion or theism, and the Christian religion in particular, substantially is as follows:

In the first place, it is now an established fact that the physical universe, whether it ever had a beginning or no, is, at all events, of an antiquity beyond what the imagination can realize; and also that, whether or no it is limited, its extent is so vast as to be equally unimaginable. Science may not pronounce it absolutely to be either eternal or infinite, but science does say this, that so far as our faculties can carry us they reveal to us no hint of either limit, end, or beginning.

It is further established that the stuff out of which the universe is made is the same everywhere and follows the same laws—whether at Clapham Common or in the farthest system of stars—and that this has always been so to the remotest of the penetrable abysses of time. It is established yet further that the universe in its present condition has evolved itself out of simpler conditions, solely in virtue of the qualities which still inhere in its elements and make to-day what it is, just as they have made all yesterdays.

Lastly, in this physical universe science has included man—not alone his body, but his life and his mind also. Every operation of thought, every fact of consciousness, it has shown to be associated in a constant and definite way with the presence and with certain conditions of certain particles of matter, which are shown, in their turn, to be in their last analysis absolutely similar to the matter of gases, plants, or minerals. The demonstration has every appearance of being morally complete. The interval between mud and mind, seemingly so impassable, has been traversed by a series of closely consecutive steps. Mind, which was once thought to have descended into matter, is shown forming itself, and slowly emerging out of it. From forms of life so low that naturalists can hardly decide whether it is right to class them as plants or animals, up to the life that is manifested in saints, heroes, or philosophers, there is no break to be detected in the long process of development. There is no step in the process which science finds any excuse for postulating or even suspecting the presence of any new factor.

And the same holds good of the lowest forms of life, and what Prof. Huxley calls “the common matter of the universe.” It is true that experimentalists have been thus far unable to observe the generation of the former out of the latter, but this failure may be accounted for in many ways, and does nothing to weaken the overwhelming evidence of analogy that such generation really does take place or has

taken place at some earlier period. "Carbonic acid, water, and ammonia," says Prof. Huxley, "certainly possess no properties but those of ordinary matter. . . . But when they are brought together under certain conditions they give rise to protoplasm; and this protoplasm exhibits the phenomena of life. I see no breach in this series of steps in molecular complication, and I am unable to understand why the language which is applicable to any one form of the series may not be used to any of the others."*

So much, then, for what modern science teaches us as to the universe and the evolution of man. We will presently consider the ways, sufficiently obvious as they are, in which this seems to conflict with the ideas of all theism and theology. But first for a moment let us turn to what it teaches us also with regard to the history and the special claims of Christianity. Approaching Christianity on the side of its alleged history, it establishes the three following points: It shows us first that this alleged history, with the substantial truth of which Christianity stands or falls, contains a number of statements which are demonstrably at variance with fact; secondly, that it contains others which, though very probably true, are entirely misinterpreted through the ignorance of the writers who recorded them; and, thirdly, that though the rest may not be demonstrably false, yet those among them most essential to the Christian doctrine are so monstrously improbable and so utterly unsupported by evidence that we have no more ground for believing in them than we have in the wolf of Romulus.

Such, briefly stated, are the main conclusions of science in so far as they bear on theology and the theologic conception of humanity. Let us now consider exactly what their bearing is. Prof. Huxley distinctly tells us that the knowledge we have reached as to the nature of things in general does not enable us to deduce from it any absolute denial either of the existence of a personal God or of an immortal soul in man, or even of the possibility and the actual occurrence of miracles. On the contrary, he would believe to-morrow in the miraculous history of Christianity if only there were any evidence sufficiently cogent in its favor; and on the authority of Christianity he would believe in God and in man's immortality. Christianity, however, is the only religion in the world whose claims to a miraculous authority are worthy of serious consideration, and science, as we have seen, considers these claims to be unfounded. What follows is this—whether there be a God or no, and whether he has given us immortal souls or no, science declares bluntly that he has never informed us of either fact; and if there is anything to warrant any belief in either, it can be found only in the study of the natural universe. Accordingly, to the natural universe science goes, and we have just seen what it finds there. Part of what it finds bears specially on the theologic conception of God, and part bears specially on the theologic conception of man. With regard to an intelligent creator and ruler, it finds him on every ground to be a baseless and a superfluous hypothesis. In former conditions of knowledge it admits that this was otherwise—that the hypothesis then was not only natural but necessary; for there were many seeming mysteries which could not be explained without it. But now the case has been altogether reversed. One after another these

* *Lay Sermons, Addresses, and Reviews*, pp. 114, 117.

mysteries have been analyzed, not entirely, but to this extent at all events, that the hypothesis of an intelligent creator is not only nowhere necessary, but it generally introduces far more difficulties than it solves. Thus, though we can not demonstrate that a creator does not exist, we have no grounds whatever for supposing that he does. With regard to man, what science finds is analogous. According to theology, he is a being specially related to God, and his conduct and his destinies have an importance which dwarfs the sum of material things into insignificance. But science exhibits him in a very different light; it shows that in none of the qualities once thought peculiar to him does he differ essentially from other phenomena of the universe. It shows that just as there are no grounds for supposing the existence of a creator, so there are none for supposing the existence of an immortal human soul; while as for man's importance relative to the rest of the universe, it shows that, not only as an individual, but also as a race, he is less than a bubble of foam is when compared with the whole sea. The few thousand years over which history takes us are as nothing when compared with the ages for which the human race has existed. The whole existence of the human race is as nothing when compared with the existence of the earth; and the earth's history is but a second and the earth but a grain of dust in the vast duration and vast magnitude of the All. Nor is this true of the past only, it is true of the future also. As the individual dies, so also will the race die; nor would a million of additional years add anything to its comparative importance. Just as it emerged out of lifeless matter yesterday, so will it sink again into lifeless matter to-morrow. Or, to put the case more briefly still, it is merely one fugitive manifestation of the same matter and force which, always obedient to the same unchanging laws, manifest themselves equally in a dung-heap, in a pig, and in a planet—matter and force which, so far as our faculties can carry us, have existed and will exist everywhere and forever, and which nowhere, so far as our faculties avail to read them, show any sign, as a whole, of meaning, of design, or of intelligence.

It is possible that Prof. Huxley, or some other scientific authority, may be able to find fault with some of my sentences or my expressions, and to show that they are not professionally or professorially accurate. If they care for such trifling criticism they are welcome to the enjoyment of it; but I defy any one to show, putting expression aside and paying attention only to the general meaning of what I have stated, that the foregoing account of what science claims to have established is not substantially true, and is not admitted to be so by any contemporary thinker who opposes science to theism, from Mr. Frederic Harrison to Prof. Huxley himself.

And now let us pass on to something which in itself is merely a matter of words, but which will bring what I have said thus far into the circle of contemporary discussion. The men who are mainly responsible for having forced the above views on the world, who have unfolded to us the verities of nature and human history, and have felt constrained by these to abandon their old religious convictions—these men and their followers have by common consent agreed, in this country, to call themselves by the name of agnostics. Now there has been much quarreling of late among these agnostics as to what agnosticism—the thing which unites them—is. It must be

obvious, however, to every impartial observer, that the differences between them are little more than verbal, and arise from bad writing rather than from different reasoning. Substantially the meaning of one and all of them is the same. Let us take, for instance, the two who are most ostentatiously opposed to each other, and have lately been exhibiting themselves, in this and other reviews, like two terriers each at the other's throat. I need hardly say that I mean Prof. Huxley and Mr. Harrison.

Some writers, Prof. Huxley says, Mr. Harrison among them, have been speaking of agnosticism as if it was a creed or a faith or a philosophy. Prof. Huxley proclaims himself to be "dazed" and "bewildered" by the statements. Agnosticism, he says, is not any one of these things. It is simply—I will give his definition in his own words—

a method, the essence of which lies in the vigorous application of a single principle. . . . Positively, the principle may be expressed : In matters of the intellect, follow your reason as far as it will take you, without regard to any other consideration. And negatively : In matters of the intellect, do not pretend that conclusions are certain which are not demonstrated or demonstrable. That I take to be the agnostic faith, which if a man keep whole and undefiled, he shall not be ashamed to look the universe in the face, whatever the future may have in store for him.

Now anything worse expressed than this for the purpose of the discussion he is engaged in, or, indeed, for the purpose of conveying his own general meaning, it is hardly possible to imagine. Agnosticism, as generally understood, may, from one point of view, be no doubt rightly described as "a method." But it is a method with no results, or with results that are of no interest? If so, there would be hardly a human being idiot enough to waste a thought upon it. The interest resides in its results, and its results solely, and specially in those results that effect our ideas about religion. Accordingly, when the word agnosticism is now used in discussion, the meaning uppermost in the minds of those who use it is not a method, but the results of a method, in their religious bearings; and the method is of interest only in so far as it leads to these. Agnosticism means, therefore, precisely what Prof. Huxley says it does not mean. It means a creed, it means a faith, it means a religious or irreligious philosophy. And this is the meaning attributed to it not only by the world at large, but in reality by Prof. Huxley also quite as much as by anybody. I will not lay too much stress on the fact that, in the passage just quoted, having first fiercely declared agnosticism to be nothing but a method, in the very next sentence he himself speaks of it as a "faith." I will pass on to a passage that is far more unambiguous. It is taken from the same essay. It is as follows:

"Agnosticism [says Mr. Harrison] is a stage in the evolution of religion, an entirely negative stage, the point reached by physicists, a purely mental conclusion, with no relation to things social at all.' I am [says Prof. Huxley] quite dazed by this declaration. Are there then any 'conclusions' that are not 'purely mental'? Is there no relation to things social in 'mental conclusions' which affect men's whole conception of life? . . . 'Agnosticism is a stage in the evolution of religion.' If . . . Mr. Harrison, like most people, means by 'religion' 'theology', then, in my judgement, agnosticism can be said to be a stage in its evolution only as death may be said to be the final stage in the evolution of life."

Let us consider what this means. It means precisely what every one else has all along been saying, that agnosticism is to all intents and purposes a doctrine, a creed, a faith, or a philosophy, the essence, of which is the negation of theologic religion. Now the fundamental propositions of theologic religion are these: There is a personal God, who watches over the lives of men; and there is an immortal soul in man, distinct from the flux of matter. Agnosticism, then, expressed in the briefest terms, amounts to two articles—not of belief, but of

disbelief. *I do not believe in any God, personal, intelligent, or with a purpose; or, at least, with any purpose that has any concern with man. I do not believe in any immortal soul, or in any personality or consciousness surviving the dissolution of the body.*

Here I anticipate from many quarters a rebuke, which men of science are very fond of administering. I shall be told that agnostics never say "there is no God," and never say "there is no immortal soul." Prof. Huxley is often particularly vehement on this point. He would have us believe that a dogmatic atheist is, in his view, as foolish as a dogmatic theist; and that an agnostic, true to the etymology of his name, is not a man who denies God, but who has no opinion about him. But this—even if true in some dim and remote sense—is for practical purposes a mere piece of solemn quibbling, and is utterly belied by the very men who use it whenever they raise their voices to speak to the world at large. The agnostics, if they shrink from saying that there is no God, at least tell us that there is nothing to suggest that there is one, and much to suggest that there is not. Surely, if they never spoke more strongly than this, for practical purposes this is an absolute denial. Prof. Huxley, for instance, is utterly unable to demonstrate that an evening edition of the "Times" is not printed in Sirius; but if any action depended on our believing this to be true, he would certainly not hesitate to declare that it was a foolish and fantastic falsehood. Who would think the better of him—who would not think the worse—if in this matter he gravely declared himself to be an agnostic? And precisely the same may be said of him with regard to the existence of God. For all practical purposes he is not in doubt about it. He denies it. I need not, however, content myself with my own reasoning. I find Prof. Huxley himself indorsing every word that I have just uttered. He declares that such questions as are treated of in volumes of divinity "are essentially questions of lunar politics, . . . not worth the attention of men who have work to do in the world": and he cites Hume's advice with regard to such volumes as being "most wise"—"Commit them to the flames, for they can contain nothing but sophistry and illusion."* Quotations of a similar import might be indefinitely multiplied; but it will be enough to add to this the statements quoted already, that agnosticism is to theologic religion what death is to life; and that physiology does but deepen and complete the gloom of the gloomiest motto of paganism—"Debemur morti." If then agnosticism is not an absolute and dogmatic denial of the fundamental propositions of theology, it differs from an absolute and dogmatic denial in a degree that is so trivial as to be, in the words of Prof. Huxley himself, "not worth the attention of men who have work to do in the world." For all practical purposes and according to the real opinion of Prof. Huxley and Mr. Harrison equally, agnosticism is not doubt, is not suspension of judgment; but it is a denial of what "most people mean by religion"—that is to say, the fundamental propositions of theology, so absolute that Prof. Huxley compares it to their death.

And now let us pass on to the next point in our argument, which I will introduce by quoting Prof. Huxley again. This denial of the fundamental propositions of theology "affects," he says, "men's whole conception of life." Let us consider how. By the Christian world,

* "Lay Sermons, Addresses, and Reviews, p. 125.

life was thought to be important owing to its connection with some unseen universe, full of interests and issues which were too great for the mind to grasp at present, but in which, for good or evil, we should each of us one day share, taking our place among the awful things of eternity. But at the touch of the agnostic doctrine this unseen universe bursts like a bubble, melts like an empty dream; and all the meaning which it once imparted to life vanishes from its surface like mists from a field at morning. In every sense but one, which is exclusively physical, man is remorselessly cut adrift from the eternal; and whatever importance or interest anything has for any of us, must be derived altogether from the shifting pains or pleasures which go to make up our momentary span of life, or the life of our race, which in the illimitable history of the All is an incident just as momentary.

Now supposing the importance and interest which life has thus lost can not be replaced in any other way, will life really have suffered any practical change and degradation? To this question our agnostics with one consent say Yes. Prof. Huxley says that if theologic denial leads us to nothing but materialism, "the beauty of a life may be destroyed," and "its energies paralyzed";* and that no one, not historically blind, "is likely to underrate the importance of the Christian faith as a factor in human history, or to doubt that some substitute genuine enough and worthy enough to replace it will arise."† Mr. Spencer says the same thing with even greater clearness: while, as for Mr. Harrison, it is needless to quote from him; for half of what he has written is an amplification of these statements.

It is admitted, then, that life, in some very practical sense, will be ruined if science, having destroyed theologic religion, can not put, some other religion in place of it. But we must not content ourselves with this general language. Life will be ruined, we say. Let us consider to what extent and how. There is a good deal in life which obviously will not be touched at all—that is to say, a portion of which is called the moral code. Theft, murder, some forms of lying and dishonesty, and some forms of sexual license, are inconsistent with the welfare of any society; and society, in self-defense, would still condemn and prohibit them, even supposing it had no more religion than a tribe of gibbering monkeys. But the moral code thus retained would consist of prohibitions only, and of such prohibitions only as could be enforced by external sanctions. Since, then, this much would survive the loss of religion, let us consider what would be lost along with it. Mr. Spencer, in general terms, has told us plainly enough. What would be lost, he says, is, in the first place, "our ideas of goodness, rectitude, or duty," or, to use a single word, "morality." This is no contradiction of what has just been said, for morality is not obedience, enforced or even instinctive, to laws which have an external sanction, but an active co-operation with the spirit of such laws, under pressure of a sanction that resides in our own wills. But not only would morality be lost, or this desire to work actively for the social good; there would be lost also every higher conception of what the social good or of what our own good is; and men would, as Mr. Spencer

* "Lay Sermons, Addresses, and Reviews," p. 137.

† Page 37.

says, "become chiefly absorbed in the immediate and the relative."* Prof. Huxley admits in effect precisely the same thing when he says that the tendency of systematic materialism is to "paralyze the energies of life," and "to destroy its beauty."

Let us try to put the matter a little more concisely. It is admitted by our agnostics that the most valuable element in our life is our sense of duty, coupled with obedience to its dictates; and this sense of duty derives both its existence and its power over us from religion, and from religion alone. How it derived them from the Christian religion is obvious. The Christian religion prescribed it to us as the voice of God to the soul, appealing as it were to all our most powerful passions—to our fear, to our hope, and to our love. Hope gave it a meaning to us, and love and fear gave it a sanction. The agnostics have got rid of God and the soul together, with the loves, and fears, and hopes by which the two were connected. The problem before them is to discover some other considerations—that is, some other religion—which shall invest duty with the solemn meaning and authority derivable no longer from these. Our agnostics, as we know, declare themselves fully able to solve it. Mr. Spencer and Mr. Harrison, though the solution of each is different, declare not only that some new religion is ready for us, but that it is a religion higher and more efficacious than the old; while Prof. Huxley, though less prophetic and sanguine, rebukes those "who are alarmed lest man's moral nature be debased," and declares that a wise man like Hume would merely "smile at their perplexities." †

Let us now consider what this new religion is—or rather these new religions, for we are offered more than one. So far as form goes, indeed, we are offered several. They can, however, all of them be resolved into two, resting on two entirely different bases, though sometimes, if not usually, offered to our acceptance in combination. One of these, which is called by some of its literary adherents Positivism or the Religion of Humanity, is based on two propositions with regard to the human race. The first proposition is that it is constantly though slowly improving, and will one day reach a condition thoroughly satisfactory to itself. The second proposition is that this remote consummation can be made so interesting to the present and to all intervening generations that they will strain every nerve to bring it about and hasten it. Thus, though humanity is admitted to be absolutely a fleeting phenomenon in the universe, it is presented relatively as of the utmost moment to the individual; and duty is supplied with a constant meaning by hope, and with a constant motive by sympathy. The basis of the other religion is not only different from this, but opposed to it. Just as this demands that we turn away from the universe, and concentrate our attention upon humanity, so the other demands that we turn away from humanity and concentrate our attention on the universe. Mr. Herbert Spencer calls this the Religion of the Unknowable; and though many agnostics consider the name fantastic, they one and all of them, if they resign the religion of humanity, consider and appeal to this as the only possible alternative.

Now I have already in this review, not many months since, endeavored to show how completely absurd and childish the first of

* "Since the beginning, religion has had the all-essential office of preventing men from being chiefly absorbed in the relative or the immediate, and of awaking them to a consciousness of something beyond it."—"First Principles," p. 100.

† "Lay Sermons," pp. 122, 124.

these two religions, the Religion of Humanity, is. I do not propose, therefore, to discuss it further here, but will beg the reader to consider that for the purpose of the present argument it is brushed aside like rubbish, unworthy of a second examination. Perhaps this request will sound somewhat arbitrary and arrogant, but I have something to add which will show that it is neither. The particular views which I now aim at discussing are the views represented by Prof. Huxley; and Prof. Huxley rejects the Religion of Humanity as completely as I do, and with a great deal less ceremony, as the following passage will demonstrate:

Out of the darkness of prehistoric ages man emerges with the marks of his lowly origin strong upon him. He is a brute, only more intelligent than the other brutes; a blind prey to impulses, which, as often as not, lead him to destruction; a victim to endless illusions which, as often as not, make his mental existence a terror and a burden, and fill his physical life with barren toil and battle. He attains a certain degree of physical comfort, and develops a more or less workable theory of life, in such favorable situations as the plains of Mesopotamia or Egypt, and, then, for thousands and thousands of years, struggles with varying fortunes, attended by infinite wickedness, bloodshed, and misery, to maintain himself at this point against the greed and the ambition of his fellow-men. He makes a point of killing or otherwise persecuting all those who try to get him to move on; and when he has moved on a step, foolishly confers post-mortem deification on his victims. He exactly repeats the process with all who want to move a step yet further. And the best men of the best epoch are simply those who make the fewest blunders and commit the fewest sins. . . . I know of no study so unutterably saddening as that of the evolution of humanity as it is set forth in the annals of history; . . . [and] when the positivists order men to worship humanity—that is to say, to adore the generalized conception of men, as they ever have been, and probably ever will be—I must reply that I could just as soon bow down and worship the generalized conception of a “wilderness of apes.” *

Let us pause here for a moment and look about us, so as to see where we stand. Up to a certain point the agnostics have all gone together with absolute unanimity, and I conceive myself to have gone with them. They have all been unanimous in their rejection of theology, and in regarding man and the race of men as a fugitive manifestation of the all-enduring something, which always, everywhere, and in an equal degree, is behind all other phenomena of the universe. They are unanimous also in affirming that, in spite of its fugitive character, life can afford us certain considerations and interests, which will still make duty binding on us, will still give it a meaning. At this point, however, they divide into two bands. Some of them assert that the motive and the meaning of duty is to be found in the history of humanity, regarded as a single drama, with a prolonged and glorious conclusion, complete in itself, satisfying in itself, and imparting, by the sacrament of sympathy, its own meaning and grandeur to the individual life, which would else be petty and contemptible. This is what some assert, and this is what others deny. With those who assert it we have now parted company, and are standing alone with those others who deny it—Prof. Huxley among them, as one of their chief spokesmen.

And now addressing myself to Prof. Huxley in this character, let me explain what I shall try to prove to him. If he could believe in God and in the divine authority of Christ, he admits he could account for duty and vindicate a meaning for life; but he refuses to believe, even though for some reasons he might wish to do so, because he holds that the beliefs in question have no evidence to support them. He complains that an English bishop has called this refusal “cowardly” —“has so far departed from his customary courtesy and self-respect as to speak of ‘cowardly agnosticism.’” I agree with Prof. Huxley that, on the grounds advanced by the bishop, this epithet “cowardly” is entirely undeserved; but I propose to show him that, if not deserved on

them, it is deserved on others, entirely unsuspected by himself. I propose to show that his agnosticism is really cowardly, but cowardly not because it refuses to believe enough, but because, tried by its own standards, it refuses to deny enough. I propose to show that the same method and principle, which is fatal to our faith in the God and the future life of theology, is equally fatal to anything which can give existence a meaning, or which can—to have recourse to Prof. Huxley's own phrases—"prevent our 'energies' from being 'paralyzed,' and 'life's beauty' from being destroyed." I propose, in other words, to show that his agnosticism is cowardly, not because it does not dare to affirm the authority of Christ, but because it does not dare to deny the meaning and the reality of duty. I propose to show that the miserable rags of argument with which he attempts to cover the life which he professes to have stripped naked of superstition, are part and parcel of the very superstition itself—that, though they are not the chasuble and the embroidered robe of theology, they are its hair-shirt, and its hair-shirt in tatters—utterly useless for the purpose to which it is despairingly applied, and serving only to make the forlorn wearer ridiculous. I propose to show that in retaining this dishonored garment, agnosticism is playing the part of an intellectual Ananias and Sapphira; and that in professing to give up all that it can not demonstrate, it is keeping back part, and the larger part of the price—not, however, from dishonesty, but from a dogged and obstinate cowardice, from a terror of facing the ruin which its own principles have made.

Some, no doubt, will think that this is a rash undertaking, or else that I am merely indulging in the luxury of a little rhetoric. I hope to convince the reader that the undertaking is not rash, and that I mean my expressions to be taken in a frigid and literal sense. Let me begin then by repeating one thing, which I have said before. When I say that agnosticism is fatal to our conception of duty, I do not mean that it is fatal to those broad rules and obligations which are obviously necessary to any civilized society, which are distinctly defensible on obvious utilitarian grounds, and which, speaking generally, can be enforced by external sanctions. These rules and obligations have existed from the earliest ages of social life, and are sure to exist as long as social life exists. But so far are they from giving life a meaning, that on Prof. Huxley's own showing they have barely made life tolerable. A general obedience to them for thousands and thousands of years has left "the evolution of man, as set forth in the annals of history," the "most unutterably saddening study" that Prof. Huxley knows. From the earliest ages to the present—Prof. Huxley admits this—the nature of man has been such that, despite their laws and their knowledge, most men have made themselves miserable by yielding to "greed" and to "ambition," and by practicing "infinite wickedness." They have proscribed their wisest when alive, and accorded them a "foolish" hero-worship when dead. Infinite wickedness, blindness, and idiotic emotion have, then, according to Prof. Huxley's deliberate estimate, marked and marred men from the earliest ages to the present; and he deliberately says also, that "as men ever have been, they probably ever will be."

To do our duty, then, evidently implies a struggle. The impulses usually uppermost in us have to be checked, or chastened, by others, and these other impulses have to be generated, by fixing our attention

on considerations which lie somehow beneath the surface. If this were not so, men would always have done their duty; and their history would not have been "unutterably saddening," as Prof. Huxley says it has been. What sort of considerations, then, must those we require be? Before answering this question let us pause for a moment, and, with Prof. Huxley's help, let us make ourselves quite clear what duty is. I have already shown that it differs from a passive obedience to external laws, in being a voluntary and active obedience to a law that is internal; but its logical aim is analogous—that is to say, the good of the community, ourselves included. Prof. Huxley describes it thus—"to devote one's self to the service of humanity, including intellectual and moral self-culture under that name"; "to pity and help all men to the best of one's ability"; "to be strong and patient," "to be ethically pure and noble"; and to push our devotion to others "to the extremity of self-sacrifice." All these phrases are Prof. Huxley's own. They are plain enough in themselves; but, to make what he means yet plainer, he tells us that the best examples of the duty he has been describing are to be found among Christian martyrs and saints, such as Catherine of Sienna, and above all in the ideal Christ—"the noblest ideal of humanity," he calls it, "which mankind has yet worshiped." Finally, he says that "religion, properly understood, is simply the reverence and love for [this] ethical ideal, and the desire to realize that ideal in life which every man ought to feel." That man "ought" to feel this desire, and "ought" to act on it, "is," he says, "surely indisputable," and "agnosticism has no more to do with it than it has with music or painting."

Here, then, we come to something at last which Prof. Huxley, despite all his doubts, declares to be certain—to a conclusion which agnosticisim its lf, according to his view, admits to be "indisputable." Agnosticisim, however, as he has told us already, lays it down as a "fundamental axiom" that no conclusions are indisputable but such as are "demonstrated or demonstrable." The conclusion, therefore, that we ought to do our duty, and that we ought to experience what Prof. Huxley calls "religion," is evidently a conclusion which, in his opinion, is demonstrated or demonstrable with the utmost clearness and cogency. Before, however, inquiring how far this is the case, we must state the conclusion in somewhat different terms, but still in terms which we have Prof. Huxley's explicit warrant for using. Duty is a thing which men in general, "as they always have been, and probably ever will be," have lamentably failed to do, and to do which is very difficult, going as it does against some of the strongest and most victorious instincts of our nature. Prof. Huxley's conclusion, then, must be expressed thus: "We ought to do something which most of us do not do, and which we can not do without a severe and painful struggle, often involving the extremity of self-sacrifice."

And now, such being the case, let us proceed to this crucial question—What is the meaning of the all-important word "*ought*"? It does not mean merely that on utilitarian grounds the conduct in question can be defended as tending to certain beneficent results. This conclusion would be indeed barren and useless. It would merely amount to saying that some people would be happier if other people would for their sake consent to be miserable; or that men would be happier as a race if their instincts and impulses were differ-

ent from "what they always have been and probably ever will be." When we say that certain conduct ought to be followed, we do not mean that its ultimate results can be shown to be beneficial to other people, but that they can be exhibited as desirable to the people to whom the conduct is recommended—and not only as desirable, but as desirable in a pre-eminent degree—desirable beyond all other results that are immediately beneficial to themselves. Now the positivists, or any other believers in the destinies of humanity, absurd as their beliefs may be, still have in their beliefs a means by which, theoretically, duty could be thus recommended. According to them, our sympathy with others is so keen, and the future in store for our descendents is so satisfying, that we have only to think of this future and we shall burn with a desire to work for it. But Prof. Huxley, and those who agree with him, utterly reject both of these suppositions. They say, and very rightly, that our sympathies are limited; and that the blissful future, which it is supposed will appeal to them, is moonshine. The utmost, then, in the way of objective results, that any of us can accomplish by following the path of duty, is not only little in itself, but there is no reason for supposing that it will contribute to anything great. On the contrary, it will only contribute to something which, as a whole, is "unutterably saddening."

Let us suppose, then, an individual with two ways of life open to him—the way of ordinary self-indulgence, and the way of pain, effort, and self-sacrifice. The first seems to him obviously the most advantageous; but he has heard so much fine talk in favor of the second, that he thinks it at least worth considering. He goes, we will suppose, to Prof. Huxley, and asks to have it demonstrated that this way of pain is preferable. Now what answer to that could Prof. Huxley make—he, or any other agnostic who agrees with him? He has made several answers. I am going to take them one by one; and while doing to each of them, as I hope, complete justice, to show that they are not only absolutely and ridiculously impotent to prove what is demanded of them, but they do not even succeed in touching the question at issue.

One of the answers hardly needs considering, except to show to what straits the thinker must be put who uses it. A man, says Prof. Huxley, ought to choose the way of pain and duty, because it conduces in some small degree to the good of others; and to do good to others ought to be his predominant desire, or, in other words, his religion. But the very fact in human nature that makes the question at issue worth arguing, is the fact that men naturally do not desire the good of others, or, at least, desire it in a very lukewarm way; and every consideration which the positivist school advance to make the good of others attractive and interesting to ourselves Prof. Huxley dismisses with what we may call an uproarious contempt. If, then, we are not likely to be nerved to our duty by a belief that duty done tends to produce and hasten a change that shall really make the whole human lot beautiful, we are not likely to be nerved to it by the belief that its utmost possible result will be some partial and momentary benefit to a portion of a "wilderness of apes." The positivist says to the men of the present day: "Work hard at the foundation of things social for on these foundations one day will arise a glorious edifice." Prof. Huxley tells them to work equally hard, only he adds that the foundation will never support anything better than pig-sties. His attempt, then, on

social grounds, to make duty binding, and give force to the moral imperative, is merely a fragment of Mr. Harrison's system, divorced from anything that gave it a theoretical meaning. Prof. Huxley has shattered that system against the hard rock of reality, and this is one of the pieces which he has picked up out of the mire.

The social argument, then, we may therefore put aside, as good perhaps for showing what duty is, but utterly useless for creating any desire to do it. Indeed, to render Prof. Huxley justice, it is not the argument on which he mainly relies. The argument, or rather the arguments, on which he mainly relies have no direct connection with things social at all. They seek to create a religion, or to give a meaning to duty, by dwelling on man's connection, not with his fellow-men, but with the universe, and thus developing in the individual a certain ethical self-reverence, or rather, perhaps, preserving his existing self-reverence from destruction. How any human being who pretends to accurate thinking can conceive that these arguments would have the effect desired—that they would either tend in any way to develop self-reverence of any kind, or that this self-reverence, if developed, could connect itself with practical duty—passes my comprehension. Influential and eminent men, however, declare that such is their opinion; and for that reason the arguments are worth analyzing. Mr. Herbert Spencer is here in almost exact accord with Prof. Huxley; we will therefore begin by referring to his way of stating the matter.

"We are obliged," he says, "to regard every phenomenon as a manifestation of some power by which we are acted on; though omnipresence is unthinkable, yet, as experience discloses no bounds to the diffusion of phenomena, we are unable to think of limits to the presence of this power; while the criticisms of science teach us that this power is incomprehensible. And this consciousness of an incomprehensible power, called omnipresent from inability to assign its limits, is just that consciousness on which religion dwells."* Now Prof. Huxley, it will be remembered, gives an account of religion quite different. He says it is a desire to realize a certain ideal in life. His terminology therefore differs from that of Mr. Spencer; but of the present matter, as the following quotation will show, his view is substantially the same.

"Let us suppose," he says, "that knowledge is absolute, and not relative, and therefore that our conception of matter represents that which really is. Let us suppose further that we do know more of cause and effect than a certain succession; and I for my part do not see what escape there is from utter materialism and necessarianism." And this materialism, were it really what science forces on us, he admits would amply justify the darkest fears that are entertained of it. It would "drown man's soul," "impede his freedom," "paralyze his energies," "debase his moral nature," and "destroy the beauty of his life."† But, Prof. Huxley assures us, these dark fears are groundless. There is indeed only one avenue of escape from them; but that avenue truth opens to us.

"For," he says, "after all, what do we know of this terrible 'matter,' except as a name for the unknown and hypothetical cause of states of our own consciousness? And what do we know of that 'spirit' over whose extinction by matter a great lamentation is arising, . . . except that it also is a name for an unknown and hypothetical cause or condition of states of consciousness?"

* "First Principles," p. 99.

† "Lay Sermons," pp. 122, 123, 127.

... And what is the dire necessity and iron law under which men groan? Truly, most gratuitously invented bugbears. I suppose if there be an 'iron' law it is that of gravitation; and if there be a physical necessity it is that a stone unsupported must fall to the ground. But what is all we really know and can know about the latter phenomena? Simply that in all human experience stones have fallen to the ground under these conditions; that we have not the smallest reason for believing that any stone so circumstanced will not fall to the ground; and that we have, on the contrary, every reason to believe that it will so fall. ... But when, as commonly happens, we change *will* into *must*, we introduce an idea of necessity which ... has no warrant that I can discover anywhere. ... Force I know, and Law I know; but who is this Necessity, save an empty shadow of my own mind's throwing?"

Let us now compare the statements of these two writers. Each states that the reality of the universe is unknowable; that just as surely as matter is always one aspect of mind, so mind is equally one aspect of matter; and that if it is true to say that the thoughts of man are material, it is equally true to say that the earth from which man is taken is spiritual. Further, from these statements each writer deduces a similar moral. The only difference between them is, that Mr. Spencer puts it positively, and Prof. Huxley negatively. Mr. Spencer says that a consciousness of the unknowable nature of the universe fills the mind with religious emotion. Prof. Huxley says that the same consciousness will preserve from destruction the emotion that already exists in it. We will examine the positive and negative propositions in order, and see what bearing, if any, they have on practical life.

Mr. Spencer connects his religion with practical life thus: The mystery and the immensity of the All, and our own inseparable connection with it, deepen and solemnize our own conception of ourselves. They make us regard ourselves as "elements in that great evolution of which the beginning and the end are beyond our knowledge or conception"; and in especial they make us so regard our "own innermost convictions."

"It is not for nothing," says Mr. Spencer, "that a man has in him these sympathies with some principles, and repugnance to others. ... He is a descendant of the past; he is a parent of the future; and his thoughts are as children born to him, which he may not carelessly let die. He, like every other man, may properly consider himself as one of the myriad agencies through whom works the Unknown Cause and when the Unknown Cause produces in him a certain belief, he is thereby authorized to profess and act with this belief."*

In all the annals of intellectual self-deception it would be hard to find anything to outdo or even to approach this. What a man does or thinks, what he professes or acts out, can have no effect whatever, conceivable to ourselves, beyond such effects as it produces within the limits of this planet; and hardly any effect, worth our consideration, beyond such as it produces on himself and a few of his fellow-men. Now, how can any of these effects be connected with the evolution of the universe in such a way as to enable a consciousness of the universe to inform us that one set of effects should be aimed at by us rather than another? The positivists say that our aim should be the progress of man; and that, as I have said, forms a standard of duty, though it may not supply a motive. But what has the universe to do with the progress of man? Does it know anything about it, or care anything about it? Judging from the language of Mr. Spencer and Prof. Huxley, one would certainly suppose that it did. Surely, in that case, here is anthropomorphism with a vengeance. "It is not for nothing," says Mr. Spencer, "that the Unknowable has implanted in a man certain impulses." What is this but the old theologic doctrine of design? Can anything be more inconsistent with the entire theory of the evolutionist? Mr. Spencer's argument means, if it means anything, that the Unknowable has implanted in us one set of

* "First Principles," p. 123.

sympathies in a sense in which it has not implanted others; else the impulse to deny one's belief, and not to act on it, which many people experience, would be authorized by the Unknowable as much as the impulse to profess it, and to act on it. And according to Mr. Spencer's entire theory, according to Prof. Huxley's entire theory, according to the entire theory of modern science, it is precisely this that is the case. If it is the fact that the Unknowable works through any of our actions, it works through all alike, bad, good, and indifferent, through our lies as well as through our truth-telling, through our injuries to our race as well as through our benefits to it. The attempt to connect the well-being of humanity with any general tendency observable in the universe, is in fact, on agnostic principles, as hopeless as an attempt to get, in a balloon, to Jupiter. It is utterly unfit for serious men to talk about; and its proper place, if anywhere, would be in one of Jules Verne's story-books. The destinies of mankind, so far as we have any means of knowing, have as little to do with the course of the Unknowable as a whole, as the destinies of an ant-hill in South Australia have to do with the question of home rule for Ireland.

Or even supposing the Unknowable to have any feeling in the matter; how do we know that its feeling would be in our favor, and that it would not be gratified by the calamities of humanity, rather than by its improvement? Or here is a question which is more important still. Supposing the Unknowable did desire our improvement, but we, as Prof. Huxley says of us, were obstinately bent against being improved, what could the Unknowable do to us for thus thwarting its wishes?

And this leads us to another aspect of the matter. If consciousness of the Unknowable does not directly influence action, it may yet be said that the contemplation of the universe as the wonderful garment of this unspeakable mystery, is calculated to put the mind into a serious and devout condition, which would make it susceptible to the solemn voice of duty. How any devotion so produced could have any connection with duty I confess I am at a loss to see. But I need not dwell on that point, for what I wish to show is this, that contemplation of the Unknowable, from the agnostic's point of view, is not calculated to produce any sense of devoutness at all. Devoutness is made up of three things, fear, love, and wonder; but were the agnostic's thoughts really controlled by his principles (which they are not) not one of these emotions could the Unknowable possibly excite in him. It need hardly be said that he has no excuse for loving it, for his own first principles forbid him to say that it is lovable, or that it possesses any character, least of all any anthropomorphic character. But perhaps it is calculated to excite fear or awe in him. This idea is more plausible than the other. The universe as compared with man is a revelation of forces that are infinite, and it may be said that surely these have something awful and impressive in them. There is, however, another side to the question. This universe represents not only infinite forces, but it represents also infinite impotence. So long as we conform ourselves to certain ordinary rules we may behave as we like for anything it can do to us. We may look at it with eyes of adoration, or make faces at it, and blaspheme it, but for all its power it can not move a finger to touch us. Why, then, should a man be in awe of this lubberly All, whose blindness and impotence are at least as remarkable as its power, and from which man is as absolutely safe

as a mouse in a hole is from a lion? But there still remains the emotion of wonder to be considered. Is not the universe calculated to excite our wonder? From the agnostic point of view we must certainly say No. The further science reveals to us the constitution of things the feeling borne in on us more and more strongly is this, that it is not wonderful that things happen as they do, but that it would be wonderful if they happened otherwise: while as for the Unknown Cause that is behind what science reveals to us, we can not wonder at that, for we know nothing at all about it, and, if there is any wonder involved in the matter at all, it is nothing but wonder at our own ignorance.

So much, then, for our mere emotions toward the Unknowable. There still remains, however, one way more in which it is alleged that our consciousness of it can be definitely connected with duty; and this is the way which our agnostic philosophers most commonly have in view, and to which they allude most frequently. I allude to the search after scientific truth and the proclamation of it, regardless of consequences. Whenever the agnostics are pressed as to the consequences of their principles, it is on this conception of duty that they invariably fall back. Mr. Herbert Spencer, on his own behalf, expresses the position thus:

The highest truth he sees will the wise man fearlessly utter, knowing that, let what may come of it, he is thus playing his right part in the world, knowing that if he can effect the change [in belief] he aims at, well; if not, well also; though not so well.*

After what has been said already it will not be necessary to dwell long on this astonishing proposition. A short examination will suffice to show its emptiness. That a certain amount of truth in social intercourse is necessary for the continuance of society, and that a large number of scientific truths are useful in enabling us to add to our material comforts is, as Prof. Huxley would say "surely indisputable." And truth thus understood it is "surely indisputable" that we should cultivate. The reason is obvious. Such truth has certain social consequences, certain things that we all desire come of it; but the highest truth which Mr. Spencer speaks of stands, according to him, on a wholly different basis, and we are to cultivate it, not because of its consequences, but in defiance of them. And what are its consequences, so far as we can see? Prof. Huxley's answer is this: "I have had, and have, the firmest conviction that . . . the *verace via* the straight road, has led nowhere else but into the dark depths of a wild and tangled forest." Now if this be the case, what possible justification can there be for following this *verace via*? In what sense is the man who follows it playing "his right part in the world"? And when Mr. Spencer says, with regard to his conduct, "it is well," with whom is it well, or in what sense is it well? We can use such language with any warrant or with any meaning only on the supposition that the universe, or the Unknowable as manifested through the universe, is concerned with human happiness in some special way, in which it is not concerned with human misery, and that thus our knowledge of it must somehow make men happier, even though it leads them into a wild and tangled forest. It is certain that our devotion to truth will not benefit the universe; the only question is, will knowledge of the universe, beyond a certain point, benefit us? But the supposition just mentioned is merely theism in disguise. It

* "First Principles," p. 123.

imputes to the Unknowable design, purpose, and affection. In every way it is contrary to the first principles of agnosticism. Could we admit it, then devotion to truth might have all the meaning that Mr. Spencer claims for it: but if this supposition is denied, as all agnostics deny it, this devotion to truth, seemingly so noble and so unassailable, sinks to a superstition more abject, more meaningless, and more ridiculous than that of any African savage, groveling and mumbling before his fetich.

We have now passed under review the main positive arguments by which our agnostics, while dismissing the existence of God as a question of lunar politics, endeavor to exhibit the reality of religion, and of duty, as a thing that is "surely indisputable." We will now pass on to their negative arguments. While by positive arguments they endeavor to prove that duty and religion are realities, by their negative arguments they endeavor to prove that duty and religion are not impossibilities. We have seen how absolutely worthless to their cause are the former; but if the former are worthless, the latter are positively fatal.

What they are the reader has already seen. I have taken the statement of them from Prof. Huxley, but Mr. Spencer uses language almost precisely similar. These arguments start with two admissions. Were all our actions linked one to another by mechanical necessity, it is admitted that responsibility and duty would be no longer conceivable. Our "energies," as Prof. Huxley admits, would be "paralyzed" by "utter necessarianism." Further, did our conception of matter represent a reality, were matter low and gross, as we are accustomed to think of it, then man, as the product of matter, would be low and gross also, and heroism and duty would be really successfully degraded, by being reduced to questions of carbon and ammonia. But from all these difficulties Prof. Huxley professes to extricate us. Let us look back at the arguments by which he considers that he has done so.

We will begin with his method of liberating us from the "iron" law of necessity, and thus giving us back our freedom and moral character. He performs this feat, or rather, he thinks he has performed it, by drawing a distinction between what *will* happen and what *must* happen. On this distinction his entire position is based. Now in every argument used by any sensible man there is probably some meaning. Let us try fairly to see what is the meaning in this. I take it that the idea at the bottom of Prof. Huxley's mind is as follows: Though all our scientific reasoning presupposes the uniformity of the universe, we are unable to assert of the reality behind the universe, that it might not manifest itself in ways by which all present science would be baffled. But what has an idea like this to do with any practical question? So far as man, and man's will, are concerned, we have to do only with the universe as we know it; and the only knowledge we have of it, worth calling knowledge, involves, as Prof. Huxley is constantly telling us, "the great act of faith," which leads us to take what has been as a certain index of what will be. Now, with regard to this universe, Prof. Huxley tells us that the progress of science has always meant, and "means now more than ever," "the extension of the province of . . . causation, and . . . the banishment of spontaneity." * And this applies, as he expressly says, to human thought and action as

* "*Lay Sermons*," p. 122.

much as to the flowering of a plant. Just as there can be no voluntary action without volition, so there can be no volition without some preceding cause. Accordingly, if a man's condition at any given moment were completely known, his actions could be predicted with as much or with as little certainty as the fall of a stone could be predicted if released from the hand that held it. Now Prof. Huxley tells us that, with regard to certainty, we are justified in saying that the stone will fall; and we should, therefore, be justified in saying similarly of the man, that he will act in such and such a manner. Whether theoretically we are absolutely certain is no matter. We are absolutely certain for all practical purposes, and the question of human freedom is nothing if not practical. What then is gained—is anything gained—is the case in any way altered—by telling ourselves that, though there is certainty in the case, there is no necessity? Suppose I held a loaded pistol to Prof. Huxley's ear, and offered to pull the trigger, should I reconcile him to the operation by telling him that, though it certainly would kill him, there was not the least necessity that it should do so? And with regard to volition and action, as the result of preceding causes, is not the case precisely similar? Let Prof. Huxley turn to all the past actions of humanity. Can he point to any smallest movement of any single human being, which has not been the product of causes, which in their turn have been the product of other causes? Or can he point to any causes which, under given conditions, could have produced any effects other than those they have produced, unless he uses the word *could* in the foolish and fantastic sense which would enable him to say that unsupported stones could possibly fly upward? For all practical purposes the distinction between *must* and *will* is neither more nor less than a feeble and childish sophism. Theoretically no doubt it will bear this meaning—that the Unknowable might have so made man, that at any given moment he could be a different being: but it does nothing to break the force of what all science teaches us—that man, formed as he is, can not act otherwise than as he does. The universe may have no necessity at the back of *it*; but its presence and its past alike are a necessity at the back of *us*; and it is not necessity, but it is doubt of necessity, that is really “the shadow of our own mind's throwing.”

And now let us face Prof. Huxley's other argument, which is to save life from degradation by taking away the reproach from matter. If it is true, he tells us, to say that everything, mind included, is matter, it is equally true to say that everything, matter included, is mind; and thus, he argues, the dignity we all attribute to mind, at once is seen to diffuse itself throughout the entire universe. Mr. Herbert Spencer puts the same view thus:

Such an attitude of mind [contempt for matter and dread of materialism] is significant not so much of a reverence for the Unknown Cause, as of an irreverence for those familiar forms in which the Unknown Cause is manifested to us. * . . . But whoever remembers that the forms of existence of which the uncultivated speak with so much scorn . . . are found to be the more marvelous the more they are investigated, and are also to be found to be in their natures absolutely incomprehensible . . . will see that the course proposed [a reduction of all things to terms of matter] does not imply a degradation of the so-called higher, but an elevation of the so-called lower.

The answer to this argument, so far as it touches any ethical or religious question, is at once obvious and conclusive. The one duty of ethics and of religion is to draw a distinction between two states of emotion and two courses of action—to elevate the one and to degrade

* “First Principles,” p. 556.

the other. But the argument we are now considering, though undoubtedly true in itself, has no bearing on this distinction whatever. It is invoked to show that religion and duty remain spiritual in spite of all materialism; but it ends, with unfortunate impartiality, in showing the same thing of vice and of cynical worldliness. If the life of Christ is elevated by being seen in this light, so also is the life of Casanova; and it is as impossible in this way to make the one higher than the other as it is to make one man higher than another by taking them both up in a balloon.

I have now gone through the whole case for duty and for religion, as stated by the agnostic school, and have shown that, as thus stated, there is no case at all. I have shown their arguments to be so shallow, so irrelevant, and so contradictory, that they never could have imposed themselves on the men who condescend to use them, if these men, upon utterly alien grounds, had not pledged themselves to the conclusion which they invoke the arguments to support. Something else, however, still remains to be done. Having seen how agnosticism fails to give a basis to either religion or duty, I will point out to the reader how it actively and mercilessly destroys them. Religion and duty, as has been constantly made evident in the course of the foregoing discussion, are, in the opinion of the agnostics, inseparably connected. Duty is a course of conduct which is more than conformity to human law; religion consists of the emotional reasons for pursuing that conduct. Now these reasons, on the showing of the agnostics themselves, are reasons that do not lie on the surface of the mind. They have to be sought out in moods of devoutness and abstraction, and the more we dwell on them, the stronger they are supposed to become. They lie above and beyond the ordinary things of life; but after communing with them, it is supposed that we shall descend to these things with our purposes sharpened and intensified. It is easy to see, however, if we divest ourselves of all prejudice, and really conceive ourselves to be convinced of nothing which is not demonstrable by the methods of agnostic science, that the more we dwell on the agnostic doctrine of the universe, the less and not the more shall duty seem to be binding on us.

I have said that agnosticism can supply us with no religion. Perhaps I was wrong in saying so, but if we will but invert the supposed tendency of religion, it can and it will supply us with a religion indeed. It will supply us with a religion which, if we describe it in theoretical language, we may with literal accuracy describe as the religion of the devil—of the devil, the spirit which denies. Instead of telling us of duty, that it has a meaning which does not lie on the surface, such meaning as may lie on the surface it will utterly take away. It will indeed tell us that the soul which sins shall die; but it will tell us in the same breath that the soul which does not sin shall die the same death. Instead of telling us that we are responsible for our actions, it will tell us that if anything is responsible for them it is the blind and unfathomable universe; and if we are asked to repent of any shameful sins we have committed, it will tell us we might as well be repentant about the structure of the solar system. These meditations, these communings with scientific truth, will be the exact inverse of the religious meditations of the Christian. Every man, no doubt, has two voices—the voice of self-indulgence or indifference, and the voice of effort and duty; but whereas the religion of the Chris-

tian enabled him to silence the one, the religion of the agnostic will forever silence the other. I say forever, but I probably ought to correct myself. Could the voice be silenced forever, then there might be peace in the sense in which Roman conquerors gave the name of peace to solitude. But it is more likely that the voice will still continue, together with the longing expressed by it, only to feel the pains of being again and again silenced, or sent back to the soul saying bitterly, I am a lie.

Such, then, is really the result of agnosticism on life, and the result is so obvious to any one who knows how to reason, that it could be hidden from nobody, except by one thing, and that is the cowardice characteristic of all our contemporary agnostics. They dare not face what they have done. They dare not look fixedly at the body of the life which they have pierced.

And now comes the final question to which all that I have thus far urged has been leading. What does theologic religion answer to the principles and to the doctrines of agnosticism? In contemporary discussion the answer is constantly obscured, but it is of the utmost importance that it should be given clearly. It says this: If we start from and are faithful to the agnostic's fundamental principles, that nothing is to be regarded as certain which is not either demonstrated or demonstrable, then the denial of God is the only possible creed for us. To the methods of science, nothing in this universe gives any hint of either a God or a purpose. Duty; and holiness, aspiration and love of truth, are "merely shadows of our own mind's throwing," but shadows which, instead of making the reality brighter, only serve to make it more ghastly and hideous. Humanity is a bubble; the human being is a puppet cursed with the intermittent illusion that he is something more, and roused from this illusion with a pang every time it flatters him. Now, from this condition of things is there no escape? Theologic religion answers, There is one and one only, and this is the repudiation of the principle on which all agnosticism rests.

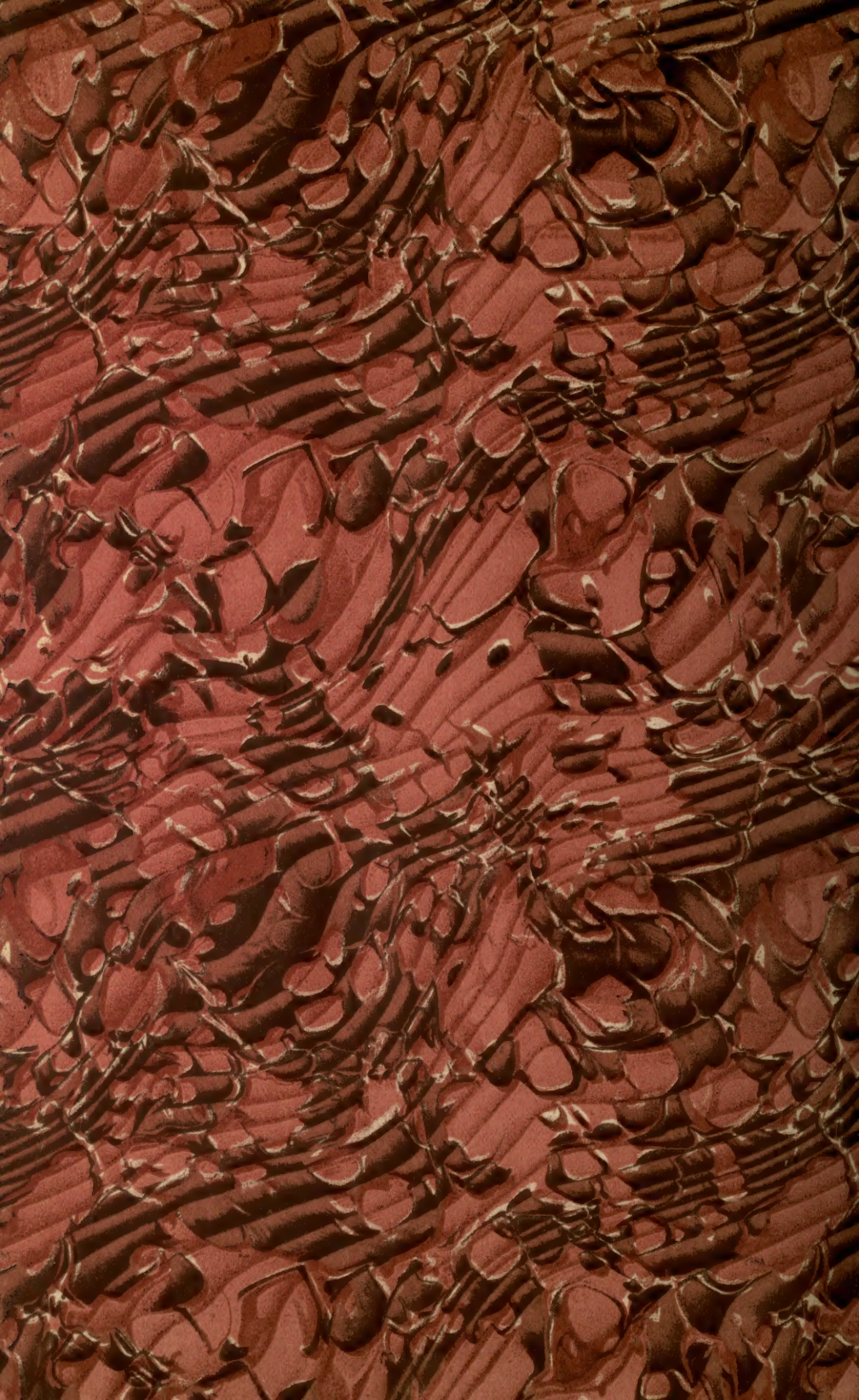
Let us see what this repudiation amounts to, and we shall then realize what, in the present day, is the intellectual basis which theologic religion claims. Theologic religion does not say that within limits the agnostic principle is not perfectly valid and has not led to the discovery of a vast body of truth. But what it does say is this: That the truths which are thus discovered are not the only truths which are certainly and surely discoverable. The fundamental principle of agnosticism is that nothing is certainly true but such truths as are demonstrated or demonstrable. The fundamental principle of theologic religion is that there are other truths of which we can be equally or even more certain, and that these are the only truths that give life a meaning and redeem us from the body of death. Agnosticism says nothing is certain which can not be proved by science. Theologic religion says, nothing which is important can be. Agnosticism draws a line round its own province of knowledge, and beyond that it declares is the unknown void which thought can not enter, and in which belief can not support itself. Where Agnosticism pauses, there religion begins. On what seems to science to be unsustaining air, it lays its foundations—it builds up its fabric of certainties. Science regards them as dreams, as an "unsubstantial pageant"; and yet even to science religion can give some account of them. Prof. Huxley says, as we have seen, that "from the nature of ratiocination," it

is obvious that it must start "from axioms which can not be demonstrated by ratiocination"; and that in science it must start with "one great act of faith"—faith in the uniformity of nature. Religion replies to science: "And I, too, start with a faith in one thing. I start with a faith which you, too, profess to hold—faith in the meaning of duty and the infinite importance of life; and out of that faith my whole fabric of certainties, one after the other, is reared by the hands of reason. Do you ask for proof? Do you ask for verification? I can give you one only, which you may take or leave, as you choose. Deny the certainties which I declare to be certain—deny the existence of God, deny man's freedom and immortality, and by no other conceivable hypothesis can you vindicate for man's life any possible meaning, or save it from the degradation at which you profess to feel so aghast." "Is there no other way," I can conceive science asking, "no other way by which the dignity of life may be vindicated except this—the abandonment of my one fundamental principle? Must I put my lips, in shame and humiliation, to the cup of faith I have so contemptuously cast away from me? May not this cup pass from me? Is there salvation in no other?" And to this question, without passion or preference, the voice of reason and logic pitilessly answers "No."

Here is the dilemma which men, sooner or later, will see before them, in all its crudeness and nakedness, cleared from the rags with which the cowardice of contemporary agnosticism has obscured it; and they will then have to choose one alternative or the other. What their choice will be I do not venture to prophesy; but I will venture to call them happy if their choice prove to be this: To admit frankly that their present canon of certainty, true so far as it goes, is only the pettiest part of truth, and that the deepest certainties are those which, if tried by this canon, are illusions. To make this choice a struggle would be required with pride, and with what has long passed for enlightenment; and yet, when it is realized what depends on the struggle, there are some at least who will think that it must end successfully. The only way by which, in the face of science, we can ever logically arrive at a faith in life, is by the commission of what many at present will describe as an intellectual suicide. I do not for a moment admit that such an expression is justifiable, but, if I may use it provisionally, and because it points to the temper at present prevalent, I shall be simply pronouncing the judgment of frigid reason in saying that it is only through the grave and gate of death that the spirit of man can pass to its resurrection.

2025 LIBRARY

X-16251



UC SOUTHERN REGIONAL LIBRARY FACILITY



A 000 457 057 8

